Implications of the Perceptions of Post Retirement Risk for the Life Insurance Industry: *Inside Track Marketing Opportunity, But Requiring Focused Retooling*

Sponsored by
The Product Development Section and
The Committee on Life Insurance Research
of the Society of Actuaries

March 2011

Researcher: Steve Cooperstein, FSA

The opinions expressed and conclusions reached by the authors are their own and do not represent any official position or opinion of the Society of Actuaries or its members. The Society of Actuaries makes no representation or warranty to the accuracy of the information.

© 2011 Society of Actuaries, All Rights Reserved

TABLE OF CONTENTS

I. EXECUTIVE SUMMARY **5**

II. INTRODUCTION **12**

III. OBSERVATIONS **13**

A. The large wave of baby-boomers are beginning to retire **14**

B. Most, but not everyone, would like to retire **16**

C. Societal changes affecting retirement financial readiness **18**
1. Migration from Defined Benefit (DB) to Defined Contribution (DC) 18
   a. Employers generally contribute less to DC than DB plans. 19
   b. In DC plans, investment responsibility is shifted to employees 19
   c. The longevity risk is also shifted to employees 19
   d. Lump sums tend to increase spending early in retirement 20
2. Increasing older-age longevity, especially for males 80+ 20
3. Continuing high inflation in health and long-term care costs 22
4. Decrease in personal savings 23
5. Home equity has become the major component of net worth 26
6. The Internet 27

D. Boomer and retiree handling of retirement finances **28**
1. Financial readiness 28
2. Concerns and attitudes about retirement 32
3. Understandings and actions 33

E. Industry products & services for post-retirement financial management. **39**
1. From insurance to investment orientation 39
2. The Graying of America - opportunity and challenge 40
3. Products 43
   a. Annuities 43
   b. Decumulation financial planning programs 50
   c. Life insurance 53
   d. Long-term care insurance (LTCI) 58
   e. Health insurance 60
   e. Property and Casualty coverages 62
   f. Non-insurance products & services 62
   g. Additional product considerations 63
4. Distribution 64
   a. Sold vs. buy vs. get help 65
   b. Channels 66
   c. Practices of retirement income advisors 68
   d. Other major distribution issues of note: 71

© 2011 Society of Actuaries, All Rights Reserved

5. The Internet ... 73

F. Government ... 75
1. Funding programs ... 75
a. Entitlements ... 75
b. Tax Incentives ... 76
2. Supervision and Regulation ... 77
a. Product approval ... 77
b. Suitability ... 77
c. Advice ... 78
d. Uniform provisions ... 78
e. Solvency ... 78
f. Supervision ... 79

G. The 2007-2009 financial turmoil and ongoing recession ... 79
1. Effects on people ... 79
a. Financial ... 79
b. Fear & doubts ... 82
c. Actions – What changes have people made? ... 84
2. Effects on the Industry ... 86
a. The basics questioned ... 86
b. Financial results ... 89
c. Product changes – Insurance industry ... 92
d. Product changes beyond insurance ... 93
e. Effects relative to distribution ... 94

IV. IMPLICATIONS AND POSSIBILITIES ... 96

A. Opportunity for post-retirement financial products & services ... 96

B. Impediments to the market ... 97
1. Consumer issues ... 97
a. Pre-dispositions of boomers ... 97
b. Fear and apprehension in this risk and emotion-laden life stage ... 97
c. Reluctance to seek advice ... 97
d. Mistrust of insurers and their unfamiliar products ... 98
e. Impact of the loss of home equity ... 98
2. Distribution issues ... 98
a. Advice in retirement is a more analytical service ... 98
b. Post-retirement planning may need to be more comprehensive ... 98
c. Retirement planning methodology is in flux ... 99

C. Societal implications ... 100
1. Redefining "retirement" ... 100
2. Access to home equity ... 101
3. Chronic care will happen even later in life ... 101
4. Leaving a legacy implications ... 101

© 2011 Society of Actuaries, All Rights Reserved

5. The need for centralized financial education 102

D. Implications for distribution 102

E. Web-based initiatives 104

F. Seeking and supporting governmental programs 104
1. Encouragement of annuitizations 104
2. Tax incentives 105
3. Education 105
4. Long-term care 105

G. Product enhancements 106
1. Revisit and revitalize "annuitization" 106
   a. Terminology 107
   b. Reframing the power of life contingent annuities 107
   c. Lower M&E charges 109
   d. Decumulation strategies/packages 109
   e. More effective lifetime COLA payout annuity 109
   f. Underwritten liquidity 109
   g. Reversionary annuities 109
2. Accumulation-phase annuities 109
   a. Living benefit guarantee riders 110
   b. Deferred variable annuity cost structure 110
   c. Combined annuities 111
   d. Indexed annuities 111
   e. Retirement housing oriented variable annuity 111
3. Make LTCI more consumer friendly 111
   a. Home health care (HHC) focus 111
   b. Chronically impaired annuities 111
   c. Tiered funding of long-term care costs 112
   d. Combination products 112
   e. Standardized "frills" 112
4. Life insurance 112
5. Health insurance 113
6. Utilizing mutual funds, ETF's, and other non-insurance products 113
   a. Other-than-insurance investments 113
   b. Standalone living benefits (SALB's) 114
   c. Reverse mortgages 114

V. CONCLUSION 114

VI. BIBLIOGRAPHY 116

© 2011 Society of Actuaries, All Rights Reserved

I. Executive summary

The emerging post-retirement market presents a significant opportunity for providers of financial services. It is an especially good opportunity for the insurance industry that has several inherent advantages for serving this market. Doing well in this market could also help the insurance industry to better penetrate other markets. However, product, marketing, and distribution retooling for this market could be key to success.

These are the broad implications and possibilities drawn from examining trends, research, and other written perceptions of the post-retirement market highlighted, hyperlinked, and discussed in this paper.

The market

A major facet of the market opportunity stems from the baby-boomer wave reaching retirement age over the next 20 years and currently owning almost one-half of all American wealth (present retirees are also a part of the marketing opportunity, though to lesser degree as a smaller and earlier birth cohort). For the financial services industry, and insurers in particular, riskier and more complicated post-retirement financial management, and the un-readiness of many for it, may be even more crucial aspects of the opportunity.

Central to these other aspects of the market opportunity is the risk of outliving one's assets - which people fear but are inadequately addressing. Increased longevity in retirement and the migration from relatively rich and secure Defined Benefit (DB) to under-funded and risk-laden Defined Contribution (DC) plans are important factors in individuals' lack of financial readiness for retirement, as is consumerism-driven low savings and high borrowing rates. Financial illiteracy also plays a part in the weak management of retirement financial matters, including perhaps exaggerated fear of catastrophic health care costs and on the other hand denial of potential long-term care costs. Accessing housing equity, the major component of net worth for most boomers and retirees, is a relatively untapped resource in this whole post-retirement financial management picture. Also relatively unexplored is the effect of increased longevity on the duration of old age chronic illness and on leaving an inheritance to increasingly older children.

© 2011 Society of Actuaries, All Rights Reserved

The 2007-2009 financial turmoil and recession hurt many, especially the more affluent, significantly, and will likely have some affect on underlying trends. Pre-retirees are now increasingly realizing that they need to postpone retirement, are saving more/spending less, and are more cautious about the stock market and interested in financial guarantees. The degree of the economic downturn's ongoing affects is not clear; Americans tend to move on, but housing equity, deficits, and labor disruptions could impart deeper long-term changes.

The upshot at this point isn't of a mass of people running out of assets, per se, especially with Social Security and other safety nets in place. Rather, lack of readiness raises the specter of 40 to 50% reductions in standards of living. And if such under-funded people don't adjust their lifestyles and finances, then they, and government support, may in fact be even more seriously impacted.

In sum, people are in need of help in understanding and managing their retirement plans in general and their complex and at-risk retirement finances in particular. Surveys suggest that baby-boomers and retirees aren't sufficiently seeking or getting help. When they do they are better off emotionally as well as financially. Helping them is thus both the opportunity and the challenge.

Potential for capturing the market

Key to financial service providers capturing this post-retirement market is likely to be a blend of capitalizing on existing strengths while retooling marketing, distribution, and products to better meet the planning, consumer education, and risk characteristics of this market. The insurance industry is advantageously positioned in these regards, but retooling appears to be key for those companies that want to fully succeed in this market.

1. **Positioning** - Consistent with this market's needs, financial advisors working in the post-retirement market report that a holistic handholding and time-intensive fee-based approach is predominating. A still unfolding variety of decumulation planning approaches are being used and tried, including stochastic modeling, buckets, various income-first floors, and asset allocation investment advice, utilizing mostly conservative investment vehicles, including Certificates of

© 2011 Society of Actuaries, All Rights Reserved

Deposit and lifetime annuities. The financial downturn further supports the need for this type of approach.

This scenario is both a plus and a minus for the insurance industry. Retail insurance products and their salespeople have migrated over the last 30 years from a lifecycle planning and protection business to an investment focus, but the industry still retains a strong base in the former. As such, the industry is still advantageously positioned to be able to adapt to serve the needs of the post-retirement market. But to truly succeed, the industry will need to retool many of its products, planning tools, marketing, training, coaching, and compensation for this market.

2. **Distribution** - The Internet has the potential to facilitate financial planning education for consumers, enabling them to more fully grasp, second-guess, and/or implement advisor recommendations. It would also help many who can't afford or whose financial situation doesn't justify personalized advisors.

   The Internet will also play a part for demand-type products such as is already happening for Medicare Supplemental insurance, Part D drug coverage, and simplified and/or low-end product sales. "Word-of-mouth" advertising, e.g. Internet based social networking, also has potential for this market as seniors tend to network. Success with social networking in this market could set the stage for using it more effectively in other markets.

   But product and planning complexity, consumer reluctance, financial illiteracy and the very nature of the post-retirement stage of life suggest that advisor-based distribution will be at least a dominant force in this market. Retooling sales practices may be inevitable in any case given the general trend toward fee-based financial planning and fiduciary standards for investment advice. Development and training in improved financial planning methodologies, including holistic help such as thoughtful access to home equity and true consumer education, will also be needed.

© 2011 Society of Actuaries, All Rights Reserved

To the degree certain insurance products can be made essential in this market, a major ancillary benefit might derive from advisors who have not heretofore used insurance in their business becoming comfortable enough with insurance to use it in other markets.

Retooling, though, won't be appealing to all. The approach to and degree of operating in this market will depend on company and advisor configurations and targets.

3. **Products** - The insurance industry has led in developing products and tools to serve the "natural for insurers" risk-oriented post-retirement market, albeit primarily timing and related design shortcomings seem to have led to less than optimal results to date. Non-insurers have only more recently fashioned a few modest attempts at post-retirement-oriented income products. There thus appears to still be an insurance product retooling opportunity in this market for insurers.

   The sales success of Guaranteed Minimum Income Benefits (GMIB) and Guaranteed for Life Withdrawal Benefits (GLWB) show people's concern about running out of money as well as the draw of being in the stock market. Research, though, shows that these products are not as effective for most retirees as using life contingent annuities in various ways, and with the downturn, their access and death benefit limitations became more apparent. Recent enablement of GLWB's for mutual funds in the form of Stand Alone Living Benefits (SALB's) would seem to further compromise the proprietary competitive value of these benefits for annuities.

   On the other hand, the general lack of success of life annuities and long-term care insurance (LTCI) to sell up to their seemingly natural potential for this market, additionally suggests how vital perception and positioning can be. Behavioral studies about people's feelings about gains and losses, and about how benefits are framed, make similar assertions and suggest the desirability of improved education and positioning.

   Moreover, especially as a result of the downturn, the concept of annuitization has gained support in a number of venues: academia; governmental tax, educational, and lifetime payout initiatives;

© 2011 Society of Actuaries, All Rights Reserved

proponents of DC plans; industry marketing organizations; the media; and (even) investment advisors. Annuitization has also had a number of notable sales successes –using an asset allocation approach; a payout product that offers a GLWB that anticipates annuitization; an income floor marketing focus, and a DC with a pension focus. This suggests that continued retooling of lifetime annuities holds promise and could be a strategic as well as tactical key for success in the post-retirement market.

Likewise, reframing LTCI could be a boon to success with this product that has suffered pricing and perhaps sequence of design shortcomings. Reframing LTCI is supported by both the state and federal government initiatives including extension of Partnership policies to more states, the favorable tax treatment of combination annuity/LTCI products under the Pension Protection Act of 2006 (PPA), and even the Community Living Assistance Services and Supports program (CLASS) portion of the Patient Protection and Affordable Care Act (PPACA).

Product-retooling suggestions include:

- **Repositioning life contingent payout annuities** –Life contingent payout annuities have been poorly positioned. They have essentially been framed as a gamble; a bet against the insurance company about how long the annuitant must live to "break even", bringing in the powerful behavioral aversion to loss. Its survivorship insurance leverage feature, which enables all buyers to safely draw more income from their assets for life than any other product or approach otherwise available, is generally not even mentioned, let alone explained and understood. This and other mal-positioning can be overcome by making how they work more transparent.

  With transparency, more meaningful and successful provisions for access, death benefits, impaired lives, varying payouts (including Cost of Living Adjustments (COLA)), and compensation, will follow.

- **Reconstituting long-term care insurance** –LTCI design has also been marred by historical development. Most prominently the

© 2011 Society of Actuaries, All Rights Reserved

mere mention of, let alone the measuring rod in most products on nursing home coverage (e.g. $X a day in a nursing home), seems to be a turnoff.

Home Health Care Only (HHCO) policies were marketed in the '90's but left the possibility of nursing home care costs uncomfortably uninsured. Moreover, insureds anti-selected by bringing caregivers into their homes With the subsequent development of at-need annuities to address the nursing home possibility, and with the focus of people's desires to stay at home or at worst go to an assisted living facility, a return to HHCO policies, even with rates approaching comprehensive policy rates, and/or ones combined with options for at-need annuitizations, seem worth pursuing.

Combination products under PPA are also promising, further promoting multi-level funding of long term care – partly insured, partly funded from tax favored accumulations, partly leveraged by at-need annuities, and perhaps integrated with an improved CLASS.

The Partnership concept and Medicaid also appear in need of retooling into a co-sharing rather than poverty driven model.

- **Renewed utilization of life insurance** – Life insurance has continually been a "reinvented" multi-purpose financial instrument serving many markets. It has features that can work well in the retirement market, including wealth transfer, income replacement, estate liquidity, and access and income alternatives, and a few companies have been working on new income provisions. Life insurance can also be brought to the forefront of planning in the post-retirement market utilizing its unique alternate asset class properties.

- **Investment products** – Beyond life-related risk needs, investing in the post-retirement market has many similar characteristics to accumulation stage investing for those with "excess" funds. However, the shortened life span in-retirement and end-of-life goals suggest different foci for investment product offerings.

© 2011 Society of Actuaries, All Rights Reserved

The tax advantage possibilities for deferred annuities under PPA (combined with LTCI) may distinguish them even though the deferral advantage is weakened by shorter remaining life years of retirees. To the extent deferred annuities don't thus become a go-to product for this market, and life insurance doesn't assume the role either, rather than try to somehow streamline them, i.e., make them more acceptable as mainstream investment instruments, the industry may need to further embrace and innovate (at least lower load) mutual funds for the investment portion of the post-retirement market.

Products and tools integrating other unique aspects of retirement can also be anticipated. Some may facilitate more effective and efficient retirement housing and continuing care as well.

© 2011 Society of Actuaries, All Rights Reserved

II. Introduction

What are the implications of the perceptions of the post-retirement market for the life insurance industry?

This broad question was posed by the Committee on Life Insurance Research of the Society of Actuaries in its Request for Proposals– Implications of the Perceptions of Post Retirement Risk for the Life Insurance Industry in view of the:

- Large baby-boomer generation beginning to swell the post-retirement market;
- The increasingly pervasive post-retirement risks highlighted by the Society of Actuaries (SOA) Committee on Post-Retirement Needs & Risks (CPRNR) in its Managing Post-Retirement Risks brochure and other studies; and
- The financial downturn beginning in 2007.

This paper addresses this question by identifying, highlighting, and discussing:

1. Observations from literature on the basic long-term societal, consumer, industry, and governmental trends, actions, and perceptions relative to the post-retirement financial management market.

   Such literature was drawn from the researcher's own files accumulated over the last 30 years of focus on this market, and pertinent research and observations culled from the online archives of leading institutional researchers, periodicals, and marketing organizations with an interest and/or focus on this market.

2. Further Observations derived from similar materials on the possible impacts of the 2007-2009 financial turmoil and recession; and

3. Implications and possibilities drawn from these Observations

© 2011 Society of Actuaries, All Rights Reserved

In doing so, in addition to summarizing each piece of research with brief highlight comments and with tables and charts drawn from the material when they are central to the highlight (the charts and tables are in all cases presented with permission of the organization that had prepared the chart or table.), the research reported is hyperlinked so that readers can conveniently study the data further and consider the research and its implications from their particular perspectives. Such hyperlinks are integrated into the text where they are the basis of the highlight; in other cases where they are the source of a statistic rather than the basis of the highlight, they follow a highlight or table in a smaller font. Moreover, to the extent hyperlinks may become outdated, their sources are catalogued at the end of the paper.

The author would also like to note with thanks the helpful and supportive guidance and constructive comments of the Project Oversight Committee:

- Thomas P Edwalds, FSA, MAAA, ACAS, Chair
- Mark Bale, FSA
- Harry I. Klaristenfeld, FSA, MAAA
- Paul D. Laporte, ASA, MAAA

and Society of Actuaries staff members Ronora Stryker, ASA, MAAA, and Jan Schuh.

III. Observations

Retirement is important to Americans - The American Dream. In many ways it came about in response to the Industrial Revolution and the Great Depression. It relies on a 3-legged stool – a governmental supported leg through Social Security; an employment supported leg through pensions and more recently defined contribution plans; and an individual leg dependent on personal savings.

All of these legs are becoming a little wobbly as the large baby boomer generation ages into retirement. A big factor is that people are living longer. Another appears to be the spending effects of prosperity and a material society, with health care costs, savings, and family interdependence suffering. The allure of the stock market and of home values only increasing have likewise kicked the stool out from under many in the financial downturn.

© 2011 Society of Actuaries, All Rights Reserved

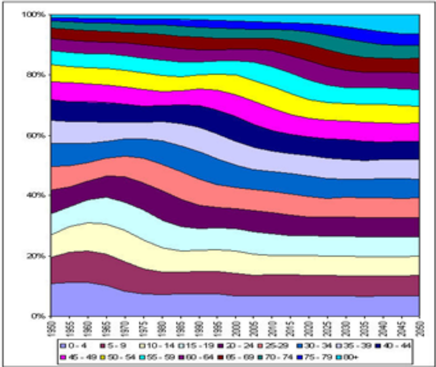
Moreover, planning and management of finances in retirement is more complicated than "merely" handling finances while working, and riskier because of the longer potential periods of both healthy and unhealthy living after retirement. Further, many if not most financial advisors are not well versed in handling the contingencies of post-retirement financial management and see it as a less lucrative business focus than serving other markets.

The insurance and financial services industries have tried to respond, but the vagaries of the market and their sales forces have made it difficult. The 2007-2009 financial turmoil has made the situation worse, without any short-term solutions. It has also brought some immediacy and reality into play, though, with potential for longer-term changes.

More specifically, the following major trends are of import to the post-retirement financial market. [Note: The 2007-2009 financial turmoil is reflected and discussed separately at the end of this section, as its possible impacts, though dramatic, are still transitory.]

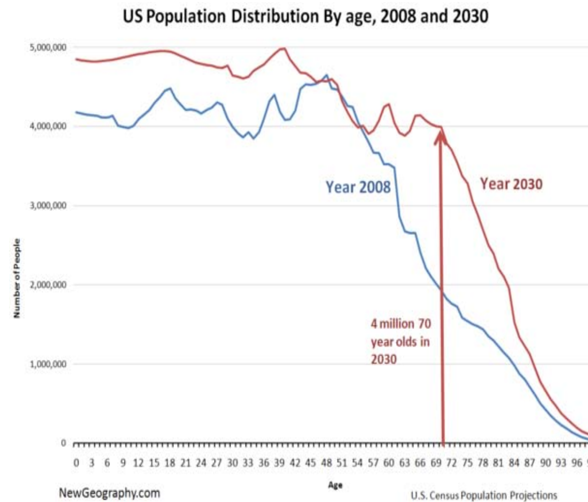
A. <u>The large wave of baby-boomers are beginning to retire</u>

The early baby-boomers (born 1946-1955) will be reaching 65 in 2011-2020, and the later baby-boomers (born 1956-1964) will be reaching 65 in 2021- 2029. They will be significantly inflating the post-retirement market over the next 40 years, making post-retirement financial management a more dominant part of the entire financial services market. In the following Changing Age Distribution of the U.S. Population 1950-2050 chart, the 4 groups at the top show that the 65+ age group (maroon & above) will grow from about 13% to 19% of the total population by 2030, leveling off to 20% by 2050, and from about 17% to 25% of the 18+ market by 2030, again leveling off to 26% by 2050.



© 2011 Society of Actuaries, All Rights Reserved

Another view of how much bigger the senior market will be by 2030 is shown in the following graph:



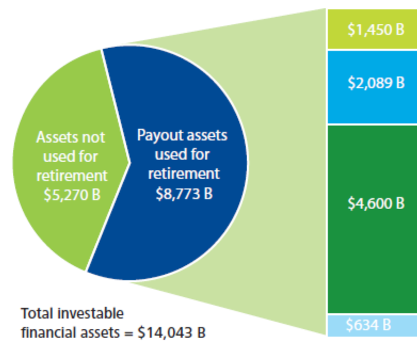
U.S. Population Projections by age, 2008 and 2030, Baby Boomers and Millennials

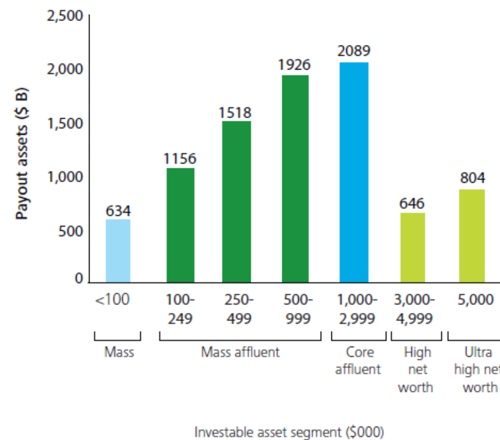
In terms of assets, the following chart from Mining Retirement Income shows that in 2007 baby boomers had $14.0 trillion in investable assets, of which they estimate that 62% ($8.7 trillion) were "payout assets". Of that, the mass affluent had 52%.

Exhibit 1. Retirement income market size and segmentation

Assets used for retirement income and assets not used for retirement income (households aged 45-64)

Retirement payout assets (households aged 45-64)





High/ultra high net worth 17%
Mass affluent 52%
Core affluent 24%
Mass market 7%

Source: Federal Reserve Board, Survey of Consumer Finances, 2007, and Deloitte analysis

[1] Investable financial assets, as defined in the *Survey of Consumer Finances*, include the following: transaction accounts, certificates of deposit, savings bonds, other bonds, publicly traded stocks, pooled investment funds (excluding money market funds), retirement accounts, and cash value life insurance, other managed assets and other financial assets. Source: Federal Reserve Board, *Survey of Consumer Finances*, 2007.

© 2011 Society of Actuaries, All Rights Reserved

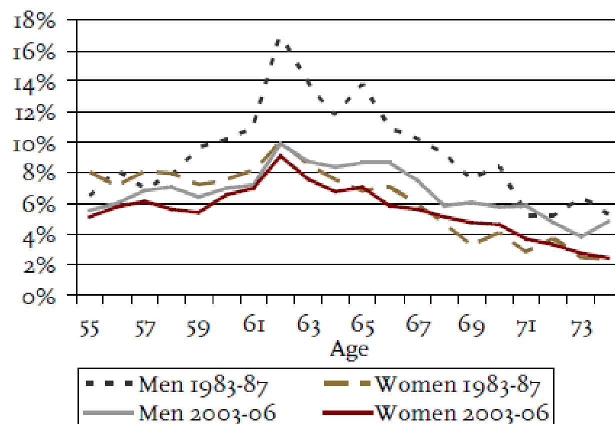
B. Most, but not everyone, would like to retire

It is not surprising to say that most people would like to retire. However, to an extent, retiring is a relatively recent reality. Only 50 years ago, almost 50% of males over 65 worked. An amusing article on The History of Retirement, From Early Man to A.A.R.P., and Why do people want to retire and Writers don't retire, why should anyone? blogs, at least raise the question of "retirement" not being an absolute.

One might thus say that though "retirement" has become a commonly accepted concept, it might more aptly be defined as being able to financially opt to stop working pretty much full time. This is embodied in a simple online discussion, Why do people want to retire?

In fact, the following graph from The Recent Trend Towards Later Retirement shows that people had been retiring earlier and earlier until recently.

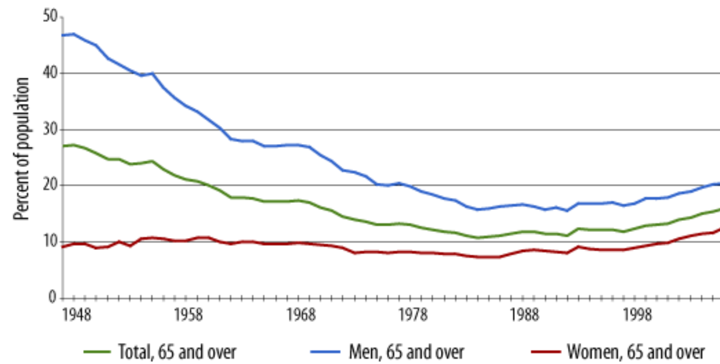
FIGURE 3. RETIREMENT RATES* BY AGE AND SEX, 1983-1987 AND 2003-2006



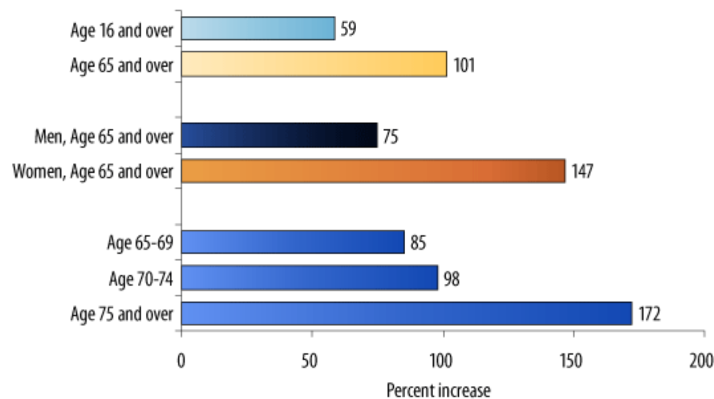
* The retirement rate equals the percentage who are not working during the survey week in March of the current year, among those who worked at all in the previous year; computed using survey weights.
Source: Author's calculations using U.S. Census Bureau, CPS (various years).

In the last 20 years there has been an up-tick in people working beyond 65, but as shown in the following graph from Older workers: Are there more older people in the workplace?, nowhere near the almost 50% participation rate of males prior to 1950.

© 2011 Society of Actuaries, All Rights Reserved



Interestingly, the following additional chart from that report shows that the recent up-tick was more by women and at advanced ages, perhaps financially motivated.



Why Do Boomers Plan To Work So Long? examines the demographics of early baby-boomers to the similar age group a decade earlier and the characteristics that are associated with the changes in retirement expectations. Interestingly, in addition to the effect of employer cutbacks in defined benefit and retiree health plans, higher education and earnings are associated with expectations of retiring later.

"The New Retirement Survey" From Merrill Lynch Reveals How Baby Boomers Will Transform Retirement similarly finds boomers more

© 2011 Society of Actuaries, All Rights Reserved

open to working after formal retirement from their career job. In juxtaposition, Cross-Cohort Differences in Health on the Verge of Retirement suggests that boomer cohorts may be less healthy than their predecessors.

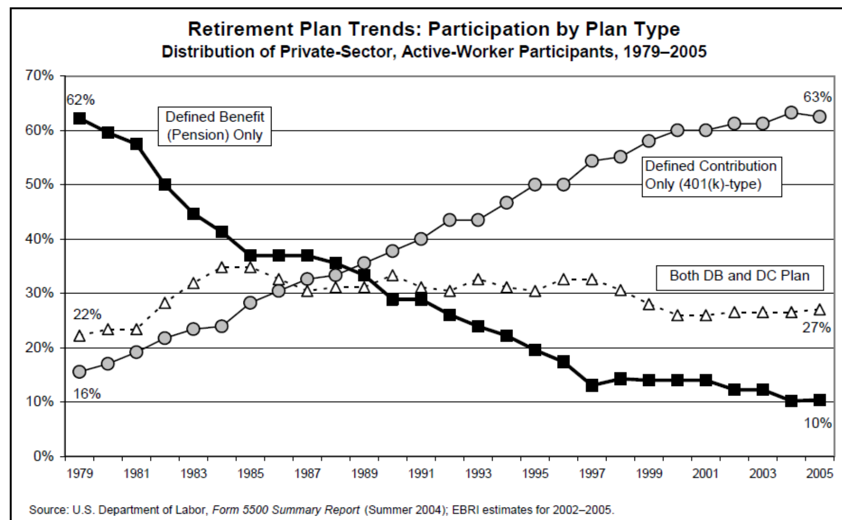
Further evidence that retirement is desirable if one is ready for it is discussed in The Well-Being of Retirees: Evidence Using Subjective Data and Is Retirement Depressing?: Labor Force Inactivity and Psychological Well-Being in Later Life.

However, Employers' (Lack Of) Response To The Retirement Income Challenge suggests that employers are not particularly empathetic to employee desires to work beyond normal retirement. Majority of U.S. Companies Slow to Realize Central Role in Helping Employees Achieve a Secure Retirement finds similar attitudes in connection with recent focus on generating retirement income from defined contribution plans.

C. Societal changes affecting retirement financial readiness

Several societal forces are making it harder for people to be financially prepared for retirement:

1. Migration from Defined Benefit (DB) to Defined Contribution (DC)
   In terms of retirement plans, Defined Benefit plans were predominant through the '70's, but have decreased in favor of Defined Contributions plans -



Retirement Trends in the United States Over the Past Quarter-Century

This move away from DB plans impacts people's preparedness for retirement:

a. Employers generally contribute less to DC than DB plans.
   As a result, responsibility is shifted to employees to make sufficient early and ongoing contributions. This shift is especially hard on lower paid employees. As reported in Average Worker Contribution Rates to 401(k)-Type Plans, the average contribution to 401(k) type plans, for those making a contribution, was 7.5% in 2006.

   The Disappearing Defined Benefit Pension and its Potential Impact on the Retirement Incomes of Boomers interestingly found that even a theoretical sudden freeze in DB plans would not have catastrophic effect on most baby-boomers, though more on younger boomers and those with higher incomes.

b. In DC plans, investment responsibility is shifted to employees
   And many, if not most employees are ill equipped for such responsibility.

   Moreover, How much risk is acceptable? shows that even optimizing employee investment choices, including target date funds and annuitizations, there would be significant variations in results depending on the sequence of market results.

   Employees also lack advantages employers can glean on a group basis.

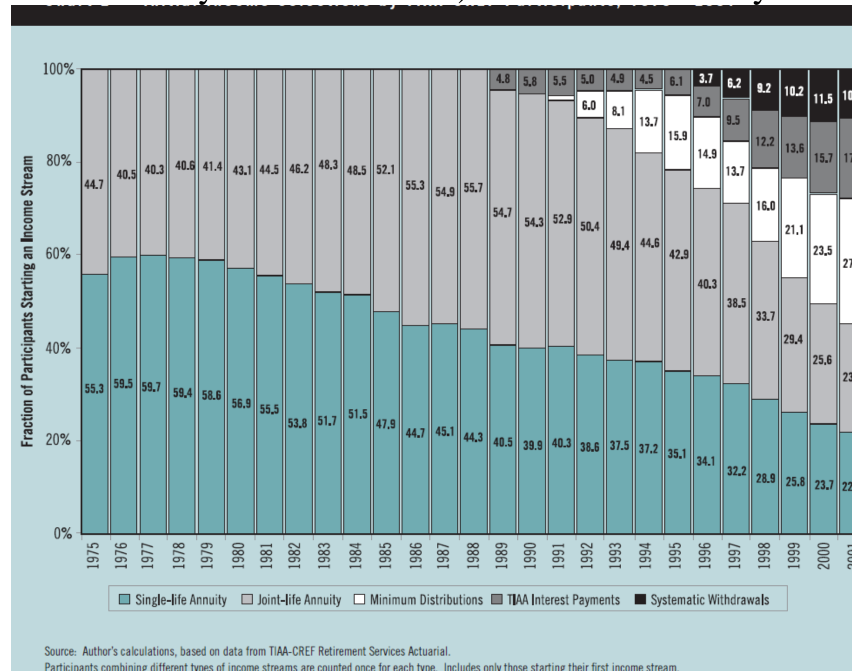
c. The longevity risk is also shifted to employees
   Employees for the most part do not annuitize their DC accumulations (most plans don't even provide the option).

   The experience of the leading and earliest issuer of variable annuitizations of qualified plans, and one with a trusting and educated participant population, is instructive. As summarized in The Retirement Patterns and Annuitization Decisions of a Cohort of TIAA-CREF Participants, in the early '90's the company began to offer alternatives to annuitization from its DC plans. Life

© 2011 Society of Actuaries, All Rights Reserved

annuitization dropped, though their election rates remained over 50%.

By 2001, only 45% of those taking income (78% of men and 72% of women took any form of income) chose a life annuity.



Trends In The Selection Of Retirement Income Streams Among TIAA-CREF Participants

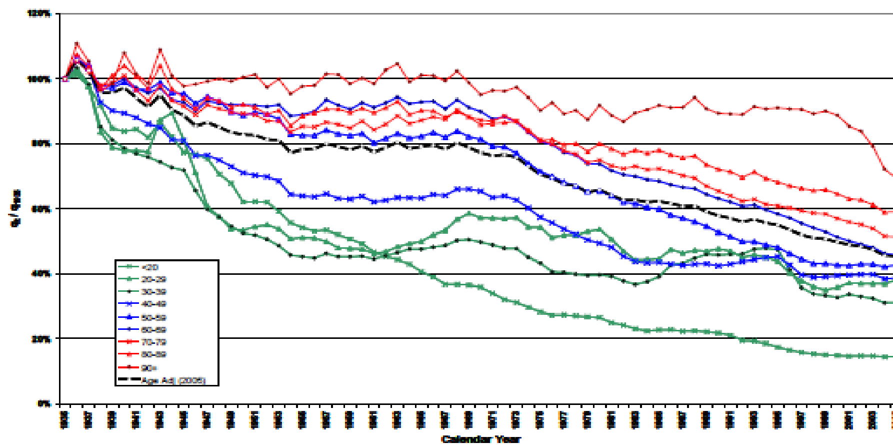
Converting assets to income in retirement: What near-retirees are thinking shows that now only 25% of near-retirees under these plans are intending to annuitize.

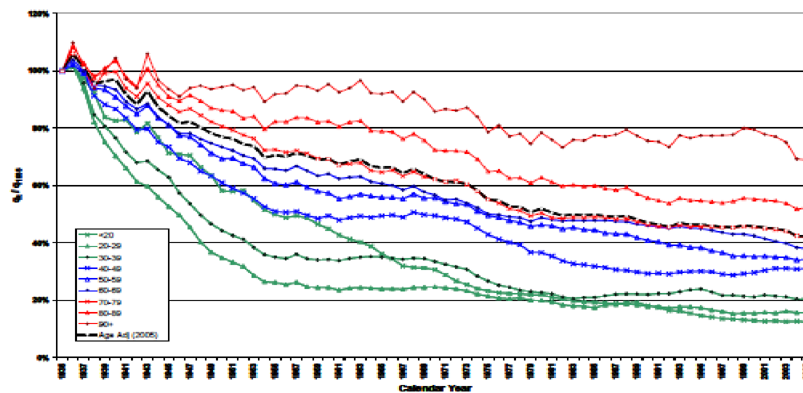
d. Lump sums tend to increase spending early in retirement
A study, Annuitized Wealth and Consumption at Older Ages, amazingly found that the expenditures of older adults were inverse to their percentage of wealth annuitized.

2. Increasing older-age longevity, especially for males 80+
These trends can be seen in the charts Life Expectancy at age 65 by Sex and Calendar Year (Based on SSA Period Tables).

A decrease in mortality rates beyond age 90 in the last decade for both males and females are also noteworthy as shown in the following 3 charts from Session 90 Aging Population: Opportunities & Risks, SOA Annual Meeting, October 21, 2008

© 2011 Society of Actuaries, All Rights Reserved





(Note: The Y-axis runs from 0% to 120% of base year Qx in 20% intervals; X-axis runs from 1935 to 2005 in 2 year intervals)

© 2011 Society of Actuaries, All Rights Reserved

This increasing older-age longevity translates to the need for even more assets to sustain boomers standard of living in retirement.

3. Continuing high inflation in health and long-term care costs
Increases in health care expenditures have outpaced inflation for decades, and though a bit more modest in the 21st century, have now increased to over 16% of GNP and are expected to reach 20% of GNP in the next decade. Centers for Medicare and Medicaid Services - National Health Expenditures data – Table 1

This has contributed to the erosion of employers offering retiree health benefits from 66% in 1988 to 35% in 2006 of private sector employers with 200+ employees. The Retiree Health Care Challenge

Moreover, Medicare, as currently funded, is projected to become insolvent in the next decade.

Under current programs, the following are the projected dollars needed at 65 for average future health expenditures for Medicare B & D, and Medigap premiums, and for deductibles and co-payments, but not vision and dental costs.

Figure 3

Savings Needed for Medigap Premiums, Medicare Part B Premiums, Medicare Part D Premiums and Out-of-Pocket Drug Expenses for Retirement at Age 65 in 2009

	Median Prescription Drug Expenses Throughout Retirement	75th Percentile of Prescription Drug Expenses Throughout Retirement	90th Percentile of Prescription Drug Expenses Throughout Retirement
Men			
Median	$86,000	$101,000	$173,000
75th percentile	134,000	159,000	279,000
90th percentile	177,000	212,000	378,000
Women			
Median	125,000	140,000	242,000
75th percentile	168,000	190,000	336,000
90th percentile	221,000	250,000	450,000
Married Couple			
Median	210,000	241,000	416,000
75th percentile	277,000	349,000	614,000
90th percentile	338,000	451,000	807,000

Source: *EBRI Notes*, June 2009, authors' simulations based on assumptions described in the text.

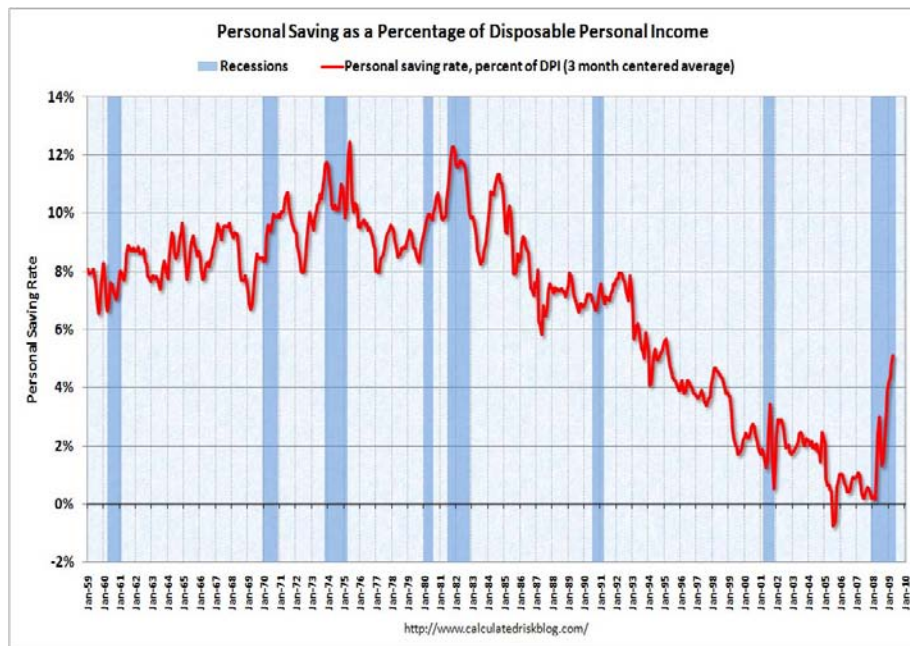
Savings Needed for Health Expenses in Retirement

© 2011 Society of Actuaries, All Rights Reserved

The $210,000 median needed for future health expenditures for a couple is far more than most people have in spendable assets at 65. It could alternatively be looked at as roughly a $12,000 a year increasing for inflation bite out of a retirement budget.

And this doesn't include the cost of long term care which has increased by roughly 5% annually over the last 5-years to an average of $34,000 a year in an assisted living facility, $66,000 a year in a semi-private nursing home room, and can cost even more for extensive care at home. Genworth 2009 Cost of Care Survey On average the total cost of long-term care might thus be $200,000 per person (this might be covered by a $3,000-$4,000 a year premium for long-term care insurance for a 60-65 year old couple, but less than 10% are buying such insurance as discussed later in this paper).

4. Decrease in personal savings
While pre-retirement saving doesn't fall within the list of post-retirement risks, per se, it is certainly a major component of retirement financial readiness.



Consumption Down, Saving Rate Increases in April

While there is some disagreement as to the measure of savings, personal savings has sharply declined since the early '80's, and

© 2011 Society of Actuaries, All Rights Reserved

the shortfall is generally accepted to be of concern The Decline in the U.S. Personal Saving Rate: Is It Real and Is It a Puzzle?

This is attributable to an increasing consumption mentality, led by baby-boomers, funded by easily built credit card debt and resulting in decreased other-than-DC plan savings (perhaps partially diluted by the size of monies in DC plans and prior run-ups in the stock market). Savings Rates Rising Toward Mediocrity

The amounts that need to be saved for retirement depends on many factors, including one's needed and desired expenditures in retirement on the liability side, and the value of other assets that might be used in retirement, most particularly Social Security and pensions. To the degree people have been seeing significant amounts accumulate in defined contribution plans, an illusion of not needing more vs. desires and needs hitting budgets for current expenditures, may be a factor in people's under-funding their saving for retirement. Disentangling the wealth effect: a cohort analysis of household saving in the 1990s

In particular, the following table shows that more than 50% of workers, even 49% of those over 55, have saved less than $50,000 (this is early 2009 data, but the 2008 data for ages 55+ was not that different).

Reported Total Savings and Investments Among Workers Providing a Response, 2009
(not including value of primary residence or defined benefit plans)

	All Workers	Ages 25–34	Ages 35–44	Ages 45–54	Ages 55+
Less than $10,000	40%	53%	37%	36%	30%
$10,000–$24,999	13	20	16	7	6
$25,000–$49,999	11	12	8	11	13
$50,000–$99,999	12	9	14	14	10
$100,000–$249,999	12	5	16	15	15
$250,000 or more	12	2	9	17	26

Source: Employee Benefit Research Institute, Mathew Greenwald & Associates, Inc., 2009 Retirement Confidence Survey.

How Much Have American Workers Saved for Retirement?

Household financial debt shows in some respects an even bleaker picture, rising to 133% of disposable income at the end of 2007. Consumers Face a Long, Hard Workout

The short-changing of saving for retirement is discussed at greater length in Will Baby-Boomers' Retirement Years Go Bust from a Lack of Savings? and Many Baby Boomers Concerned About Retirement Savings, Taking Less Action, Scottrade/BetterInvesting

Moreover, while inheritances will help some, an In their dreams: what will boomers be left? study found that higher amounts of inheritances generally inure to those who begin with higher net worth to begin and that inheritances in general won't bail out hurting boomers.

In summary, the following is deemed inherent to the problem.

Learnings from behavioral finance

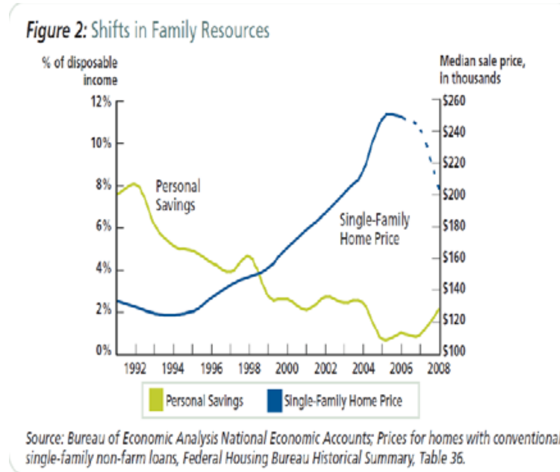
- Motivating individuals to plan for retirement is extremely difficult
  - The payoff for behavioral change is quite uncertain
  - Workers do not easily buy the idea of payoffs in the distant future
  - The promise of pleasure tomorrow means pain today
  - The wrong decision yields instant gains
  - There is no immediate tangible reward for saving now
  - The savings decision can be postponed without immediate penalty
  - There are no functional deadlines for action.

Source: Gary Selnow, "Motivating Retirement Planning," from Mitchell and Utkus, *Pension Design and Structure*, Oxford University Press, 2004 63

In these respects, an analysis Savings Rate and "Economic Security" in Retirement of how much people should save each year to generally maintain their standard of living in retirement – 15%, puts the problem into perspective.

Interestingly, planning, or not, seems to be a major factor in wealth and satisfaction in retirement. Explaining Why So Many People Do Not Save

5. Home equity has become the major component of net worth
While liquid savings have decreased, home values have increased.



Tapping Home Equity in Retirement

Moreover, an amazing 80% of seniors own homes, even those 75+.

Age of householder	Third Quarter 2007	Third Quarter 2008
United States	68.2	67.9
.Under 25 years	25.3	23.4
.25 to 29 years	40.5	41.1
.30 to 34 years	55.3	52.6
.35 to 39 years	65.1	64.4
.40 to 44 years	70.8	69.8
.45 to 49 years	73.5	73.8
.50 to 54 years	77.1	76.6
.55 to 59 years	80.3	79.3
.60 to 64 years	82.0	80.9
.65 to 69 years	80.8	81.4
.70 to 74 years	82.2	81.2
.75 years and over	78.2	78.8

U.S. Census Bureau - Homeownership Rates by Age of Householder

Thus the largest component of pre- and post-retirement accumulated net worth is home equity. Unfortunately, home equity is at least semi-illiquid and problematic in terms of access for retirement purposes. And housing debt for people age 65-74 is up from 18% in 1992 to 43% in 2007. Retiring? Pay Off Your Mortgage

© 2011 Society of Actuaries, All Rights Reserved

Two-thirds of people over 55 plan to age in their homes (only 9% live in an active adult-age restricted community). 55+ Housing: Builders, Buyers, and Beyond

Moreover, people do not plan how they might access their home equity; rather they hold on to it and it serves as a reserve for unplanned living or health expenses or is left as a bequest.

Table 5. Do Not Plan to Tap Equity: Intended Use of House

Response	Age			
	50-54	55-59	60-65	All
Insurance against living and health expenses	41	47	48	44
Bequest	20	19	18	20
Other	9	8	13	9
Not sure	30	25	20	27

Source: Authors' calculations from the CRR-Harris Survey, 2007.

Do people plan to tap their home equity in retirement?

Optimal Retirement Asset Decumulation Strategies: The Impact of Housing Wealth shows that utilizing home equity by using a reverse mortgage would greatly improve average household retirement lifetime income compared to current postponement tactics. However, Reverse Mortgages: A Closer Look at HECM Loans cautions they could be risky and Home Equity Conversion (Reverse) Mortgages Exploited to Defraud Senior Citizens suggests they can be abused.

Demographic Trends, Housing Equity, and the Financial Security of Future Retirees further examines the degree that home equity might help people in retirement in the future, but concludes that there are too many variables to make firm projections. Home Equity and At-Need Annuities–A Dynamic Long-Term Care Funding Duo on the other hand shows how home equity can be combined with an at-need annuity as a component to funding long-term care.

6. The Internet

The Internet and technology has revolutionized a great deal of day-to-day business and social life, particularly as to information and data. While young people are more tuned into technology, 80% of

© 2011 Society of Actuaries, All Rights Reserved

late- and 70% of early-boomers, and even 45% of people 65-80 now use the Internet. **Generations Online in 2009** For retirees, it is a form of staying in community and in action, even if one has physically slowed down a bit. Its potential going forward seems basic.

D. Boomer and retiree handling of retirement finances

1. Financial readiness

The societal trends discussed above have had their impacts.

As of the end of 2007 only 72% of workers say they have saved anything for retirement, and of those that have, many seemingly haven't saved enough.

Reported Total Savings and Investments
Among Those Providing a Response
(not including value of primary residence or defined benefit plans)

	All Workers	Ages 25–34	Ages 35–44	Ages 45–54	Ages 55+
Less than $10,000	36%	49%	33%	29%	28%
$10,000–$24,999	13	18	13	11	8
$25,000–$49,999	12	14	12	13	7
$50,000–$99,999	12	13	12	10	16
$100,000–$249,999	15	4	21	18	18
$250,000 or more	12	2	8	20	23

Source: Employee Benefit Research Institute and Mathew Greenwald & Associates, Inc., 2008 Retirement Confidence Survey.®

2008 Retirement Confidence Survey - How Much Have Workers Saved for Retirement?

Segmenting the Middle Market: Retirement Risks and Solutions reported the following median income and net worth mid-decade data for pre- and recent-retired middle market segments:

Middle Market Segmentation

	Married	Single Female	Single Male	Total
	Middle Mass - 55-64			
Number	5.2 million	2.5 million	1.4 million	**9.1 million**
Income	$75,000	$28,000	$41,000	
Net Worth	$348,000	$111,000	$125,000	
Non-Financial Assets	$240,000	$75,000	$89,000	
Financial Assets	$108,000	$36,000	$36,000	
	Middle Mass - 65-74			
Number	3.0 million	1.9 million	0.9 million	**5.8 million**
Income	$45,000	$18,000	$25,000	
Net Worth	$285,000	$130,000	$130,000	
Non-Financial Assets	$185,000	$85,000	$88,000	
Financial Assets	$100,000	$45,000	$42,000	

© 2011 Society of Actuaries, All Rights Reserved

	Middle Affluent - 55-64			
Number	1.0 million	0.5 million	0.3 million	**1.8 million**
Income	$132,000	$58,000	$79,000	
Net Worth	$1,300,000	$415,000	$465,000	
Non-Financial Assets	$884,000	$299,000	$349,000	
Financial Assets	$416,000	$116,000	$116,000	
	Middle Affluent - 65-74			
Number	0.6 million	0.4 million	0.2 million	**1.2 million**
Income	$93,000	$43,000	$54,000	
Net Worth	$1,100,000	$480,000	$490,000	
Non-Financial Assets	$690,000	$320,000	$340,000	
Financial Assets	$410,000	$160,000	$150,000	
Total				**17.9 million**

The Middle-Mass market pre-retirees and single households appear to have especially weak financial assets to income ratios. Being able to access their higher, but still deficient in total non-financial asset component of net worth (most of it probably home equity) will likely be key to retiring and the standard of living that they will be able to maintain in retirement.

In a similar vein, Retirement vulnerability of new retirees: The likelihood of outliving their assets reports on a study of the financial assets to standard of living relationship of pre and at-retirement workers. The study found that pre-retirees without pensions would require reductions in standard of living in the order of 25-35% to avoid running out of money at the fairly strict 5% failure tolerance rate.

Comparison of replacement rates of current retirees (2 decades older than early baby boomers), pre-retirees (one decade older than early baby boomers), and early and late baby boomers is developed in It's All Relative: Understanding the Retirement Prospects of Baby-Boomers as summarized in the following Table 12 from that study. The key finding is that overall replacement rates were projected in 2003 to decrease from the 93% experienced by people who retired a decade or more ago to the low 80%'s, mostly owing to a decrease in DB pension benefits (increasingly offset by income from retirement accounts).

© 2011 Society of Actuaries, All Rights Reserved

Table 12. Median Replacement Rates[a] at Age 67, by Source

	Birth Cohort			
	Current Retirees 1926-35	Near Retirees 1936-45	Early Baby Boomers 1946-55	Late Baby Boomers 1956-65
Total				
Total Income	**93%**	**82%**	**80%**	**81%**
Nonretirement Income	**30**	**29**	**30**	**30**
Income from Assets	15	14	15	15
Earnings	15	14	15	15
SSI Benefits	0	0	0	0
Retirement Income	**63**	**53**	**50**	**51**
Social Security Benefits	38	34	32	31
DB Pension Benefits	21	14	12	10
Retirement Accounts	4	6	7	9
Married Men				
Total Income	**90%**	**79%**	**80%**	**81%**
Nonretirement Income	**32**	**33**	**35**	**35**
Income from Assets	13	14	16	15
Earnings	20	19	19	21
SSI Benefits	0	0	0	0
Retirement Income	**57**	**46**	**45**	**46**
Social Security Benefits	32	29	28	27
DB Pension Benefits	21	11	11	10
Retirement Accounts	4	5	7	9
Married Women				
Total Income	**92%**	**84%**	**80%**	**79%**
Nonretirement Income	**30**	**29**	**29**	**29**
Income from Assets	19	16	16	15
Earnings	11	13	13	14
SSI Benefits	0	0	0	0
Retirement Income	**62**	**56**	**52**	**50**
Social Security Benefits	37	34	31	31
DB Pension Benefits	21	16	13	11
Retirement Accounts	5	6	7	9
Nonmarried Men				
Total Income	**96%**	**85%**	**83%**	**83%**
Nonretirement Income	**22**	**23**	**28**	**26**
Income from Assets	15	14	17	17
Earnings	8	9	10	8
SSI Benefits	0	0	0	0
Retirement Income	**73**	**62**	**55**	**57**
Social Security Benefits	45	38	34	34
DB Pension Benefits	25	17	12	11
Retirement Accounts	3	8	9	13
Nonmarried Women				
Total Income	**100%**	**84%**	**80%**	**83%**
Nonretirement Income	**27**	**23**	**22**	**25**
Income from Assets	15	14	13	15
Earnings	12	8	9	10
SSI Benefits	1	0	0	0
Retirement Income	**72**	**62**	**58**	**58**
Social Security Benefits	50	45	41	39
DB Pension Benefits	17	11	11	11
Retirement Accounts	4	6	6	7

Notes:
[a]Replacement rates are calculated as the ratio of income at age 67 to shared lifetime earnings. Shared lifetime earnings is the average of wage-indexed shared earnings between ages 22 and 62, where shared earnings are computed by assigning each individual half the total earnings of the couple in the years when the individual is married and his or her own earnings in years when nonmarried.

Source: Authors' tabulations of MINT (see text for details).

51

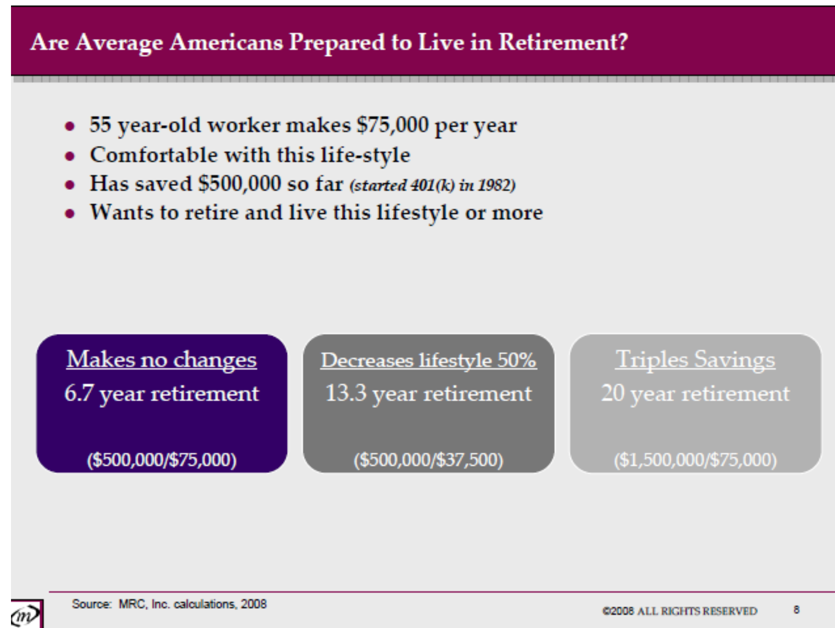
Median measures of course don't focus on the distribution of individual experience (the report does provide indications of distribution), but median projections suffice to give a feel of what might broadly be in prospect.

Health Care Costs Drive Up the National Retirement Risk Index also estimates that almost 61% of baby boomer households will not be able to maintain their standard of living in retirement.

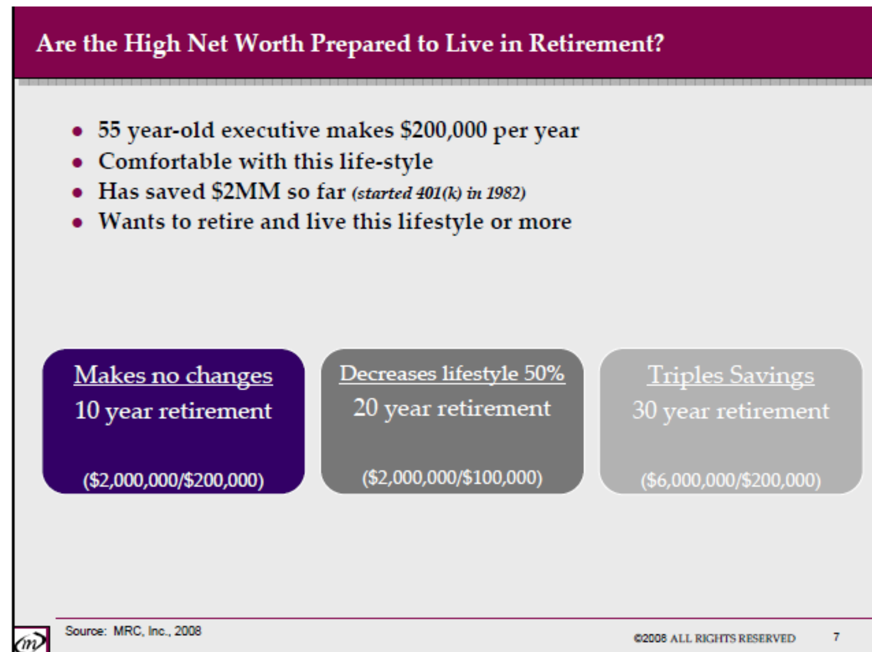
The idea that boomers, even ones with seemingly good financials, will be taxed to maintain their standard living in retirement can be

© 2011 Society of Actuaries, All Rights Reserved

illustrated in perhaps a too "consumer friendly" way (i.e., easy to follow and how people often think, albeit simplistic and potentially misleading) as in the following slides presented in Session 35 of the 2008 Society of Actuaries Annual Meeting -



And perhaps even more intriguing –



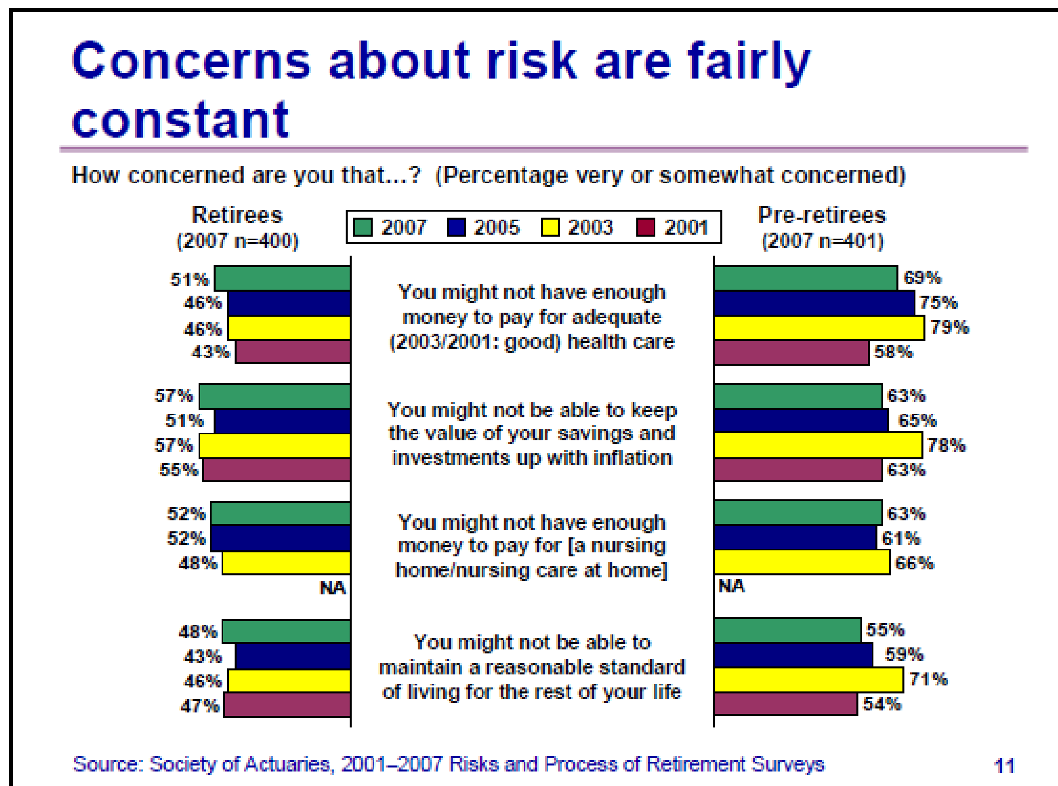
© 2011 Society of Actuaries, All Rights Reserved

2. Concerns and attitudes about retirement

Given these prospects - that many will not be financially ready to maintain their standard of living in retirement, it is instructive to look at pre-retiree and recently retired outlooks and concerns about finances in retirement.

The following chart summarizes the major findings and primary concerns from the Society of Actuaries Risks and Process of Retirement Survey that has been conducted biennially since 2001. It shows that:

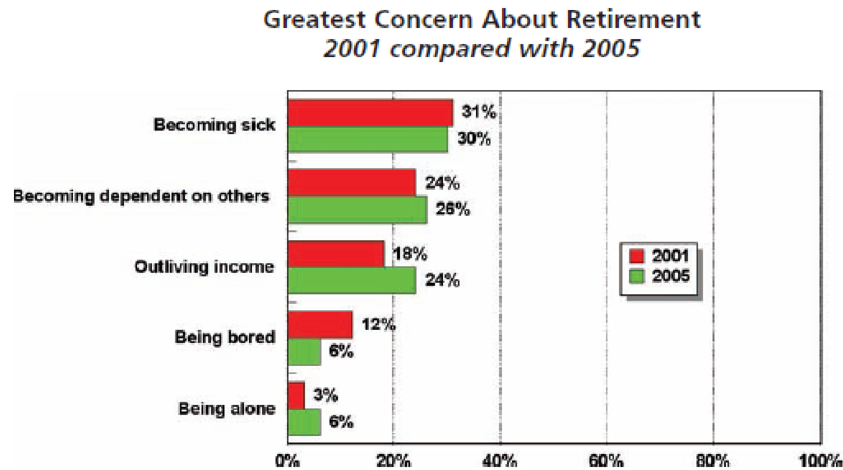
- People have consistent concerns with primary retirement financial risks – health costs; inflation; long-term care costs; & maintaining ones standard of living,
- But those concerns seem to decrease when one is actually experiencing retirement (cohort differences are likely also a factor).



Understanding Changes During Retirement: Results of Two Studies Webcast

© 2011 Society of Actuaries, All Rights Reserved

The MetLife Survey of American Attitudes Toward Retirement - What's Changed? found that boomers in 2005 were increasingly (33% vs. 19% in 2001) worried about retirement, and increasingly concerned about outliving their income -



Moreover, "concerns" seem to be all that couples agree upon about retirement. Couples don't see eye-to-eye on retirement

Workers are further not confident about entitlement programs and having enough money for long-term care. The 2008 Retirement Confidence Survey - Americans Much More Worried About Retirement And most still underestimate their likely cost of long-term care and erroneously think Medicare or their health insurance will cover it Long-Term Care IQ

The New Retirement Mindscape. A groundbreaking, comprehensive study of the retirement journey provides interesting insight not only to pre- and post-retirement stages, but also attitudes relative to financial advisors.

3. Understandings and actions

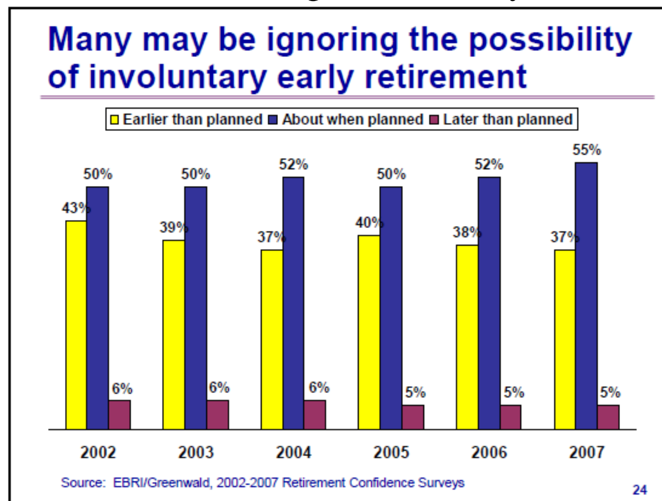
People by and large perceive most of the financial risks they might face in retirement, but are at best imprecise in their evaluation of them and are reluctant to spend significantly on preventatives.

Public Misperceptions About Retirement Security lists and discusses 10 major misconceptions people have which compromise their retirement financial security -

© 2011 Society of Actuaries, All Rights Reserved

1. Saving too little.
2. Not knowing when (forced) retirement will occur
3. Living longer than planned.
4. Not facing facts about long-term care
5. Trying to self-insure against long life.
6. Not understanding investments.
7. Relying on poor advice.
8. Not knowing sources of retirement income.
9. Failing to deal with inflation.
10. Not providing for a surviving spouse.

Moreover, the Society of Actuaries Risks and Process of Retirement Survey showed people were reluctant to insure against retirement risks. The following are summary charts.



Insurance plays only a small role in preparing for increased need

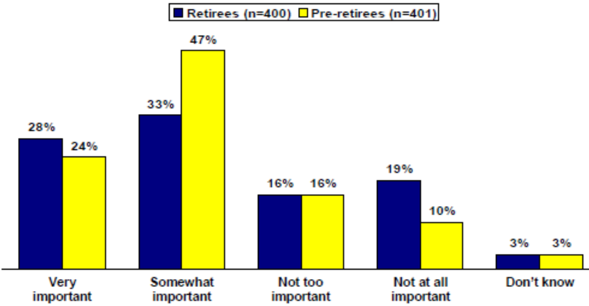
What, if anything, have you done or will you do to prepare for your changing needs in retirement? (Among those expecting less active stages)

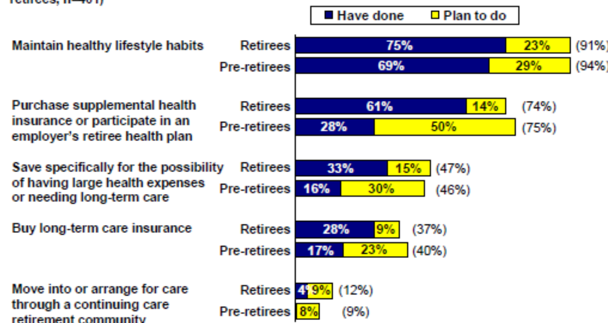
Top Mentions (multiple responses accepted)	Retirees (%) (n=330)	Pre-retirees (%) (n=353)
Save (more) money	16	37
Invest to make assets last	15	19
Buy long-term care insurance	11	8
Make home modifications	6	4
Cut back on spending	6	4
Stay healthy/improve health	4	4
Pay off debts	2	5
Nothing	28	15
Don't know	7	7

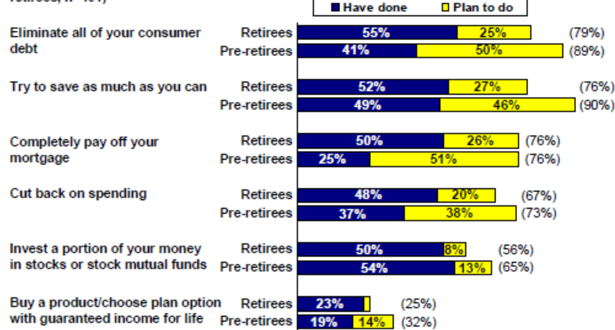
Source: Society of Actuaries, 2007 Risks and Process of Retirement Survey

33

© 2011 Society of Actuaries, All Rights Reserved







Understanding Changes During Retirement: Results of Two Studies Webcast

© 2011 Society of Actuaries, All Rights Reserved

Who Prefers Annuities? Observations About Retirement Decisions shows only 12% of retirees from large companies who only had DC plans received annuity payments, and survey-based aversion to annuities versus lump sums.

The Retirement Confidence Survey - 2007 Results - Saving for Retirement in America further reports that the survey results “over the past 14 years continue to show that overall retirement confidence among workers does not seem to be affected by either stock market performance or varying economic conditions” – about 70% are very or somewhat confident. Yet, “49% of workers who have not saved for retirement nonetheless feel confident that they will have a comfortable retirement”, even though their savings are quite low even at ages 55+ as noted earlier.

Do Households Have a Good Sense of Their Retirement Preparedness? further shows that individuals’ assessment of preparedness for retirement was different (the shaded quadrants) from the National Retirement Risk Index (NRRI) evaluation.

TABLE 5. HOUSEHOLDS ‘AT RISK’ AND NOT ‘AT RISK’ ACCORDING TO THE NRRI AND INDIVIDUAL RESPONSES, 2006

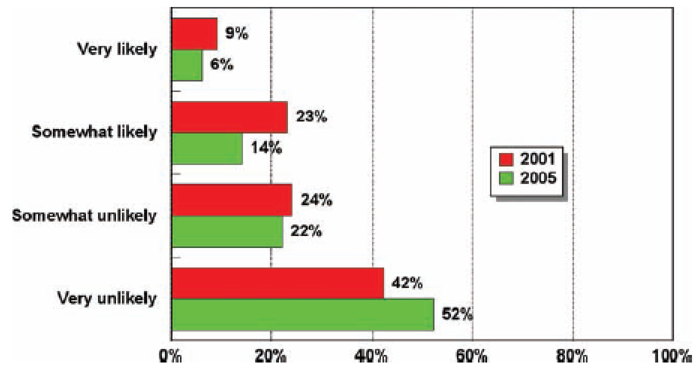
Household response	NRRI	
	‘At risk’	Not ‘at risk’
‘At risk’	25% (quadrant I)	24% (quadrant II)
Not ‘at risk’	19% (quadrant III)	32% (quadrant IV)

Sources: Authors’ calculations based on Center for Retirement Research at Boston College (2006) and 2004 SCF.

The MetLife Survey of American Attitudes Toward Retirement - What’s Changed? also shows that boomers concerns about retiring translate to thinking they will need to retire later and/or have a lower standard of living, yet they have not moved to save more. Most significantly, they say they are unlikely to spend less in retirement to leave money to heirs as shown in the following chart.

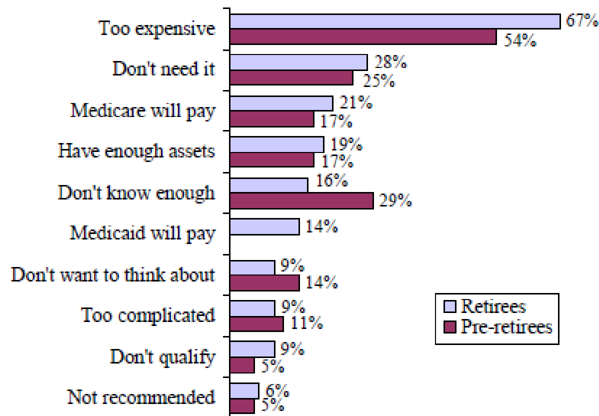
© 2011 Society of Actuaries, All Rights Reserved

Likelihood of Spending Less In Retirement To Leave Money For Others
2001 compared with 2005



They are similarly concerned about long-term care costs, but only 12% expect their savings will cover these costs. Surprising, 40% say they are likely to buy long-term care insurance – hopeful, but not demonstrated by purchasing trends.

Figure 2 —
Reasons for Not Owning Long-Term Care Insurance*



**Retirement Risks — How They Are Viewed and Managed*, LIMRA International, 2002.
2,768 retirees aged 55-78 and 538 pre-retirees aged 50-70 completed a mail questionnaire in the fall of 2001. Pre-retirees were defined as planning to retire within two years.

On the other hand, while surveys uniformly identify concerns about health care expenditures to be the major concern of both pre-retirees and those already retired, and while the cost of health care in retirement is certainly significant, if budgeted for, the underlying concern about catastrophic health costs, even at end of life, does not seem as scary as the seeming fear, as shown by the following data (albeit the higher percentage categories are projected to increase).

© 2011 Society of Actuaries, All Rights Reserved

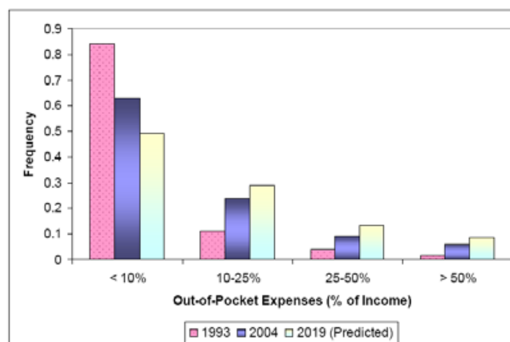


Figure 4
Out-of-Pocket Medical Expenditures as a Percentage of Before-Tax Household Income, Age 75-84, in 1993, 2004, and 2019 (Predicted)

Note: N = 1,728 (1993), and N = 1,954 (2004 and predicted 2015). All dollar amounts adjusted by the GDP deflator, and estimated using population weights. Observations excluded if household income is less than $5,000 in 2004 dollars. The 2004 measure asked about the past two years of spending, so one-half the reported amount is presented. For the prediction, a real growth rate of 1.2 percent for income, and 4.0 percent for out-of-pocket expenditures, are assumed, with the latter based on Catlin et al. (2007).

Are You Sure You're Saving Enough for Retirement?

Will Assets Last a Lifetime? suggests that retirees with $100,000 of investable assets think they are managing their finances fairly well, but many have pensions and many do not seem to have a feel for how long their assets need to last.

Financial Literacy and Retirement Planning: New Evidence from the Rand American Life Panel finds that financial literacy is key to retirement planning. It is noteworthy that stock market participation seems connected to financial literacy too. Financial Literacy and Stock Market Participation It is disconcerting to see how few people ask an advisor for help in evaluating their retirement needs –

Figure 12
Method of Determining Savings Needed for Retirement, by Doing a Retirement Needs Calculation
(multiple responses accepted)

		Did Retirement Needs Calculation	
	All Workers	Yes	No
Guess	43%	8%	72%
Ask a financial advisor	19	33	5
Do your own estimate	19	35	3
Read or hear how much needed	9	7	12
Use an online calculator	7	15	<0.5
Fill out a worksheet or form	4	9	0
Base on current expenses or desired retirement lifestyle	2	<0.5	3
Other	4	2	6

Source: Employee Benefit Research Institute and Mathew Greenwald & Associates, Inc., 2008 Retirement Confidence Survey.®

The 2008 retirement confidence survey: Americans much more worried about retirement

© 2011 Society of Actuaries, All Rights Reserved

A recent study about changes in information provided by the social Security Administration found that education helped, but hasn't seemingly changed behavior. The Role Of Information For Retirement Behavior: Evidence Based On The Stepwise Introduction Of The Social Security Statement A similar finding was found in a study of people in higher education. Ignorance is not bliss: the importance of Financial education And several other studies show that more (options) is actually less. Plan Investment Options and Participant Behavior However, many studies have also shown that education and planning can affect results. Baby Boomer Retirement Security: the Roles of Planning, Financial Literacy, and Housing Wealth In fact, Study: Advice Improves 401(k) Performance shows that not only did those 401(k) participants who get professional advice have a significantly higher annual return, those 55 and over who did have professional advice tended to increase their level of risk as they neared retirement age.

Yet, Barriers to Financial Advice enumerates the many impediments to especially non-affluent people for getting good advice, including both their own and advisors' hesitancies.

E. Industry products & services for post-retirement financial management

1. From insurance to investment orientation

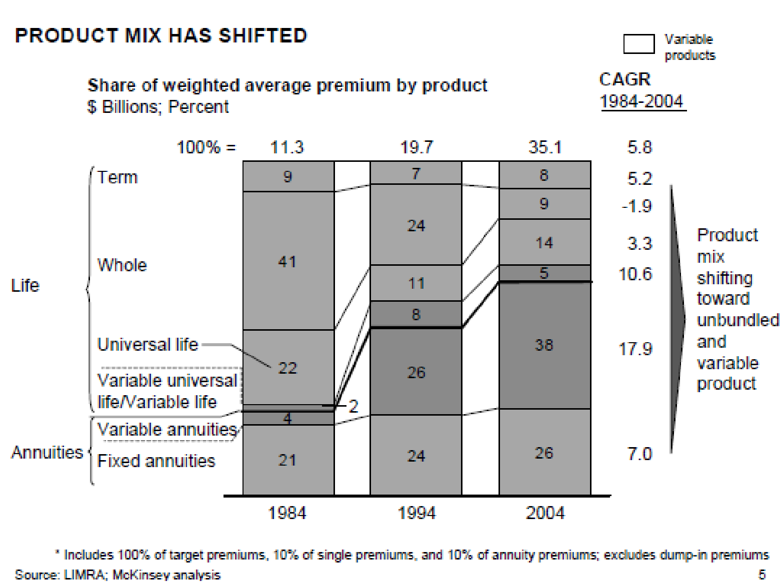
Savings have always been a significant component of life insurance and it's sale. However, the prosperity of the 60's and inflation of the 70's, together with various disfavors with DB plans, spawned expansion of mutual fund investments, and money market and Certificate of Deposit saving, respectively. The insurance business responded with corresponding variable and fixed deferred annuities featuring tax-deferred accumulation and death benefits. Unfortunately, these insurance product responses incorporated life insurance-like elements resulting in product complexity, consumer confusion and distrust, the need to be sold (rather than bought), and higher distribution costs, seemingly compromising the success of the responses.

Insurers have continued to innovate with many other accumulation oriented products over the years with the result that there has been a transformation from a life insurance dominated business through the

© 2011 Society of Actuaries, All Rights Reserved

70's, to one in which individual annuities is now the biggest line (as measured by reserves).[ACLI Life Insurers Fact Book 2009 – Table 3.6]

In term of sales, the following chart on the trend in individual retail product mix shows the huge shift to annuities, particularly variable annuities (even with single premiums included at 10%).



Trends in Distribution

2. The Graying of America - opportunity and challenge

This insurance to investment background is offered as a setting for discussing the industry's prospective for the post-retirement market.

The following 4 charts, as well as others in The U.S. Retirement Market, 2009, put the retirement market opportunity and competitive forces in perspective:

- The components of "retirement assets" market share and trends therein;
- Retirement assets' 34% size relative to all household assets; and
- Industry share of the IRA and DC plan submarkets.

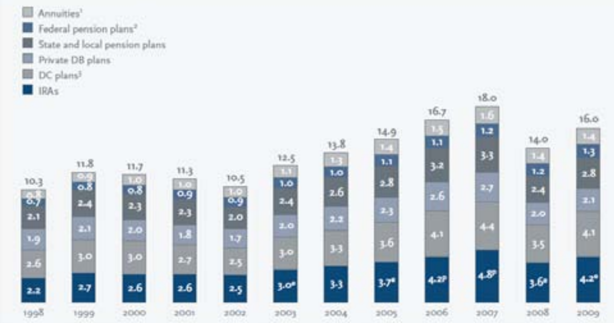
They indicate a not insignificant insurance industry share of the market, but also that there is much market beyond that share, particularly in IRA's and DC plans.

© 2011 Society of Actuaries, All Rights Reserved

Figure 1

U.S. Retirement Assets

Trillions of dollars, year-end, 1998–2009



[1]*Annuities include all fixed and variable annuity reserves at life insurance companies less annuities held by IRAs, 403(b) plans, 457 plans, and private pension funds (including 401(k) plans).*

[2]*Federal pension plans include U.S. Treasury security holdings of the civil service retirement and disability fund, the military retirement fund, the judicial retirement funds, the Railroad Retirement Board, and the foreign service retirement and disability fund. These plans also include securities held in the National Railroad Retirement Investment Trust and Federal Employees Retirement System (FERS) Thrift Savings Plan (TSP).*

[3]*DC plans include 403(b) plans, 457 plans, and private employer-sponsored DC plans (including 401(k) plans).*

[e]*Data are estimated.*

[p]*Data are preliminary.*

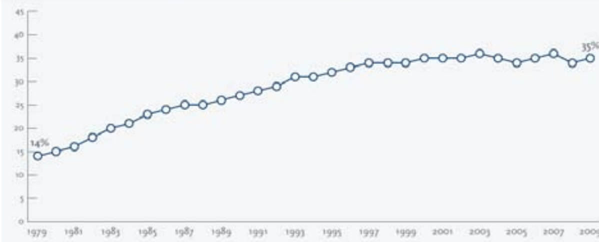
Note: Components may not add to the total because of rounding.

Sources: Investment Company Institute, Federal Reserve Board, National Association of Government Defined Contribution Administrators, American Council of Life Insurers, and Internal Revenue Service Statistics of Income Division

Figure 3

Retirement Assets Represented 35 Percent of Household Financial Assets

Retirement assets as a percentage of household financial assets, year-end, 1979–2009



Sources: Investment Company Institute, Federal Reserve Board, National Association of Government Defined Contribution Administrators, American Council of Life Insurers, and Internal Revenue Service Statistics of Income Division

Figure 4

46 Percent of IRA Assets Were Invested in Mutual Funds

IRA assets by type of institution, end-of-period, 1990–2008, 2009:Q1–2009:Q4

	Mutual funds		Bank and thrift deposits[1]		Life insurance companies[2]		Securities held in brokerage accounts[3]		Total assets
	Assets *Billions*	Share[4] *Percent*	Assets *Billions*	Share[4] *Percent*	Assets *Billions*	Share[4] *Percent*	Assets *Billions*	Share[4] *Percent*	*Billions*
1990	$139	22%	$266	42%	$40	6%	$191	30%	$637
1991	187	24	283	36	45	6	262	34	776
1992	235	27	275	31	50	6	313	36	873
1993	319	32	263	26	62	6	350	35	993
1994	345	33	255	24	70	7	386	37	1,056
1995	470	36	261	20	81	6	476	37	1,288
1996	589	40	259	18	92	6	527	36	1,467
1997	773	45	254	15	136	8	565	33	1,728
1998	972	45	249	12	157	7	772	36	2,150
1999	1,265	48	243	9	203	8	940	35	2,651
2000	1,239	47	250	10	203	8	937	36	2,629
2001	1,167	45	255	10	211	8	987	38	2,619
2002	1,037	41	263	10	268	11	965	38	2,533
2003	1,317	44	268	9	285	10	1,123[e]	38	2,993[e]
2004	1,509	46	269	8	283	9	1,238	38	3,299
2005	1,688	46	278	8	308	8	1,378[e]	38	3,652[e]
2006	2,015	48	313	7	318	8	1,562[p]	37	4,207[p]
2007	2,288	48	340	7	325[e]	7	1,831[p]	38	4,784[p]
2008	1,585	44	391	11	310[e]	9	1,293[e]	36	3,579[e]
2009:Q1	1,491	43	410	12	309[e]	9	1,218[e]	36	3,428[e]
2009:Q2	1,678	45	424	11	307[e]	8	1,348[e]	36	3,757[e]
2009:Q3	1,876	46	429	10	306[e]	7	1,481[e]	36	4,093[e]
2009:Q4	1,953	46	431	10	303[e]	7	1,544[e]	36	4,230[e]

[1]*Bank and thrift deposits include Keogh deposits.*

[2]*Life insurance company IRA assets are annuities held by IRAs, excluding variable annuity (VA) mutual fund IRA assets, which are included in mutual funds.*

[3]*Securities held in brokerage accounts exclude mutual fund assets held through brokerage accounts, which are included in mutual funds.*

[4]*Share is the percentage of total IRA assets.*

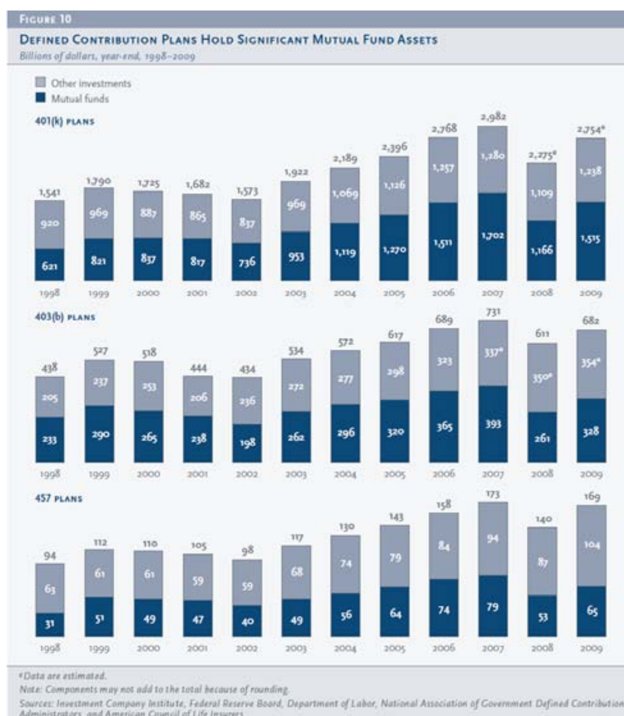
[e]*Data are estimated.*

[p]*Data are preliminary.*

Note: Components may not add to the total because of rounding.

Sources: Investment Company Institute, Federal Reserve Board, American Council of Life Insurers, and Internal Revenue Service Statistics of Income Division

© 2011 Society of Actuaries, All Rights Reserved



The insurance industry has been in the forefront of recognizing the Graying of America, developing products and services in anticipation of the risk needs and opportunities of post-retirement, outpacing the spotty attempts of other financial institutions. The problems consumers face are well summarized by insurers, such as in this "Investor Guide", Retirement Income Solutions for a Changing Market.

However, succeeding with these post-retirement offerings, particularly in contrast to the relatively entrenched investment/accumulation and wealth transfer foci of many of its distributors has not been easy and many would say still wanting.

A major part of the reason for the shortfalls may be the nature of the risks themselves. Of all of the post-retirement risks enumerated, most fall within the scope of providing monies to pay for retirement in lieu of earned income from working. The 3-legged stool provides that some replacement will come from Social Security, some from employer retirement plans, and the rest from personal savings (The Fourth Pillar: Retirement Choices adds lifestyle and financial choice). The question is – How to provide for "the rest", for an unknown life span and experience, that may last one day to over 40

© 2011 Society of Actuaries, All Rights Reserved

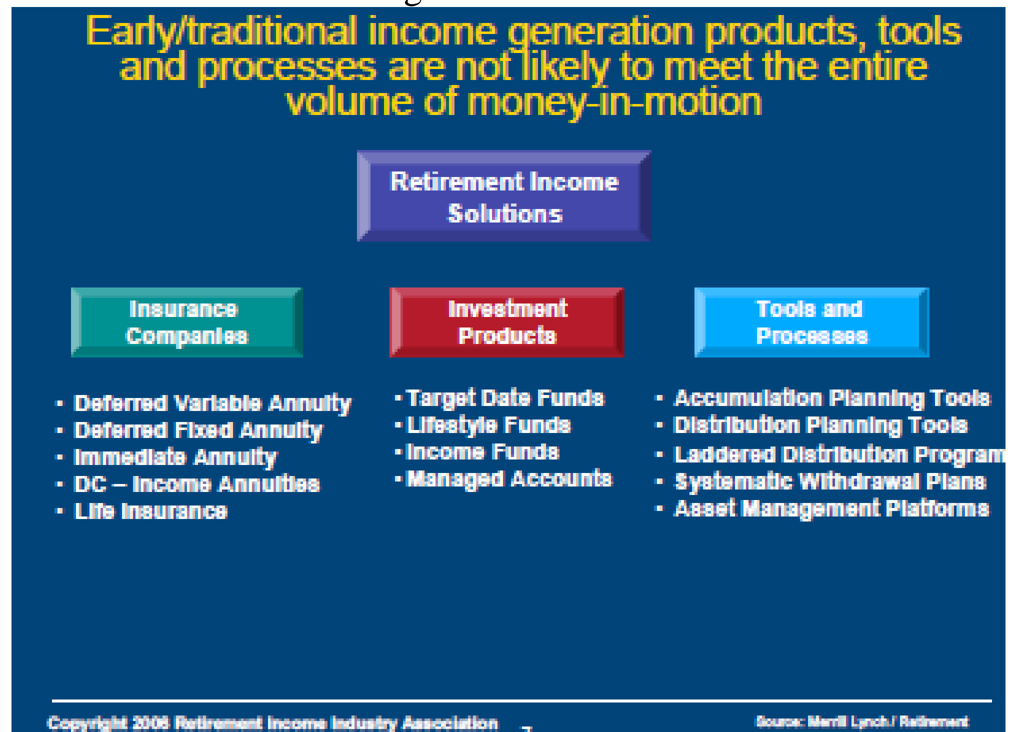
years, with unknown but likely increasing health difficulties, and with an ever-changing economy and its varied repercussions, etc.

This is a much more complicated task than the relatively entrenched foci of providing investment alternatives or insurances against singular catastrophes such as auto, home, health, and death.

The "solution", if there is one, needs to evolve. The following somewhat undocumented and anecdotal histories of the attempts, successes, and failures of the evolving "solution", are of note.

3. Products

A 2006 overview is offered to begin -



[Innovative Retirement Income and Old-Age Insurance Products: The Perspective of the Retirement Income Industry Association]

The following products are primary:

a. Annuities

Individual annuity sales now total $250 billion a year, with variable and fixed proportions significantly affected by market conditions.

© 2011 Society of Actuaries, All Rights Reserved

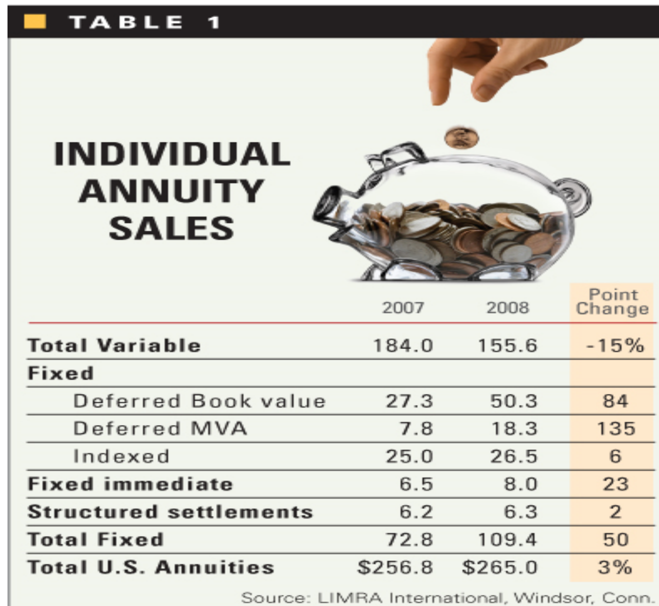


TABLE 1

INDIVIDUAL ANNUITY SALES

	2007	2008	Point Change
Total Variable	184.0	155.6	-15%
Fixed			
Deferred Book value	27.3	50.3	84
Deferred MVA	7.8	18.3	135
Indexed	25.0	26.5	6
Fixed immediate	6.5	8.0	23
Structured settlements	6.2	6.3	2
Total Fixed	72.8	109.4	50
Total U.S. Annuities	$256.8	$265.0	3%

Source: LIMRA International, Windsor, Conn.

FA Sales Skyrocketed In '08 While VA Sales Plunged: LIMRA

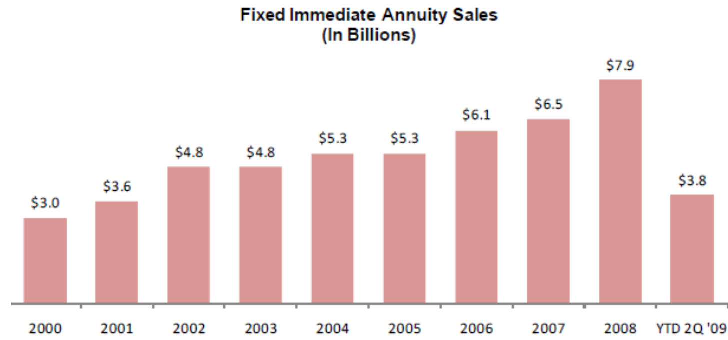
The 2009 Survey of Owners of Non-Qualified Annuity Contracts shows a reasonably satisfied middle class buyer, age 52, 80% of whom earn less than $100,000 of income. 93% now, at average age 70, still retain their original annuity.

A discussion of the product features focused on post-retirement follows.

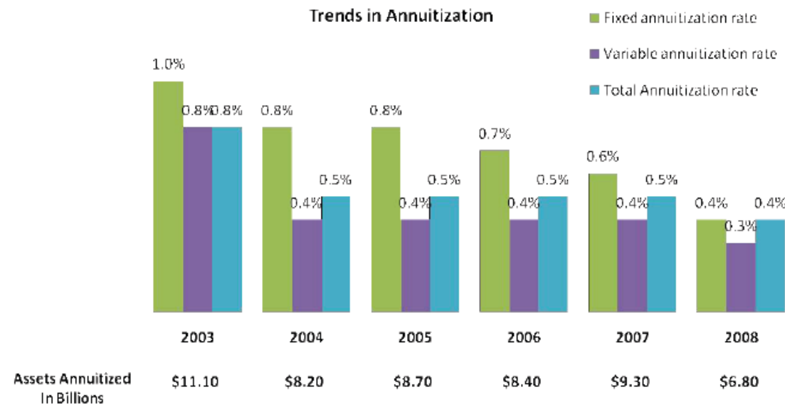
1) Immediate Annuities
   Immediate annuities are the most obvious "solution" to replacing earned income for an unknown lifespan. Their average issue age is around 70, with 31% issued over 80, and their average size is over $100,000, with nonqualified's somewhat larger than qualified and more sales to females than males. Focus on Immediate Annuities

   The trouble has been that immediate annuities have not lived up to their fit. Sales of immediate annuities have been increasing, but to still only $8 billion a year for fixed Single Premium Immediate Annuities (SPIA's).

© 2011 Society of Actuaries, All Rights Reserved



Annuitizations from deferred annuities and life insurance are also around $8 billion a year, and their rate has dropped to ½%.



By some estimates, though, the potential of income annuities with the coming of the baby boomers could be $100's of billions.

Annuitization: Keeping Your Options Open suggests that their optimal nature may have been somewhat stifled by Social Security and DB plan annuitizations.

Early efforts anticipating the baby boomers, increased longevity, and monies due to flow out of DC plans, has been to improve SPIA's. Various weaknesses of the product had/have been identified, but patches have come up short as summarized in the following table.

© 2011 Society of Actuaries, All Rights Reserved

Shortcoming	**Patch**	**Weakness of the patch**
Loss of principal on death	Providing minimum payments or amount guarantees	Water down the leverage of the life-contingent element, and doesn't fully alleviate the loss of principal anxiety
Lack of access to a values	Allowing access to funds available as death benefits or even beyond in some cases	Not full access to remainder of purchase payments
Erosions of inflation	Increasing income options, including ones that are Consumer Price Index (CPI) indexed.	The hit to income of perhaps 25% and TIPS don't provide investment leverage
	Saying the returns on Immediate Variable Annuities (IVA's) would take care of inflation over time	They don't correlate and aren't guaranteed
People feeling they have shorter life expectancies than others	Offering substandard annuities	Such people don't perceive a risk of running out of money as much as people who might live "who knows how long".
Low investment rate environment and the cost of annuities	Laddering, deferring, or providing longevity insurance	Unless well designed, these can be confusing to distributors as well as retirees
Covering a couple	Providing joint and last survivor coverage	This too waters down the leverage of the product
The complications of long-term care "income" needs	Combining with Long-term Care Insurance (LTCI) coverages, especially under the Pension Protection Act of 2006 (PPA) tax advantages in 2010	Such packaging complicates the offering – for the salesperson as well as the consumer – if not well structured
Disenchantment by distributors	Use for only part of client's funds; trail commissions; not an easy sale	A work in progress

© 2011 Society of Actuaries, All Rights Reserved

Some of the weaknesses of the results may have been in the execution of the patches – which patches were put together; how they were marketed, smaller company innovations that didn't drive copycats, and the timing of introducing reformations.

Making Your Nest Egg Last a Lifetime makes the case for at least partial annuitization.

In Unsolved Mystery it is postured that compensation may be a factor in it not being offered by financial advisors.

For instance, early-on immediate annuities ("immediates") were presented as if it was a total solution, which not only scared prospects but also distributors in terms of a sort of last sale to a client. When one company started suggesting immediates for only 15-25% of a client's holdings in the mid-90's, there was some success. There was also a large push for Immediate Variable Annuities (IVAs) around the turn of the century, which seemingly failed because the innovations were too complex, the push was too early (before the baby boomers), and running into the 2000-2002 equity market downturn.

Confusion, negativity, and lore about "annuities" also haven't helped. Nor does the lack of understanding and promotion of the insurance leveraging of the life contingent element. In fact, a behavioral finance study, Behavioral Obstacles to the Annuity Market, suggests that it may be that the feeling that annuitization is a gamble, evaluates its impact separately from all other considerations, and gives more weight to short-term loss aversion than possible long term gain. Framing and Annuities seems to confirm that if immediate annuities are perceived as investment alternatives, they are seen as having increased risk without commensurate reward. New Retirees Often Make Poor Decisions further pursues this course of thought. This suggests framing immediate annuities as a means of covering spending needs.

© 2011 Society of Actuaries, All Rights Reserved

To an extent framing is a factor in the recent success of an insurer where a SPIA (with several novel patches) has been incorporated as an asset class within an asset allocation model focused on income as well as growth. Part of the success, though, likely also stems from heavy promotion to their distributors.

2) Guaranteed Minimum Income Benefit (GMIB)
Given successes of VA's and their Guaranteed Minimum Death Benefits and enhancements thereto, GMIB's were introduced successfully in the later '90's, speaking to people's concerns about running out of money, but sold within the accumulation mold as another distinguishing feature from other investments. Guaranteed Minimum Accumulation Benefits (GMAB) haven't sold as well.

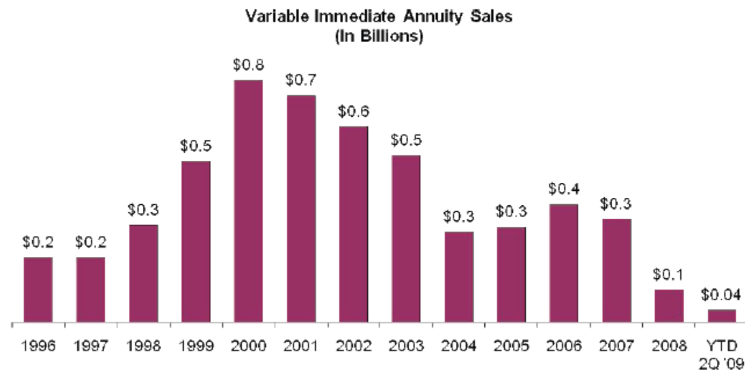
These features are particularly significant in trying to compete in qualified plans where annuity tax deferral is not a distinguishable benefit. The question of suitability in general has been raised about VA's, and living benefits in particular. Variable Annuities With Living Benefits: Worth The Fees?

Of note are the low exercise rates, about 5%, for in-the-money GMIB options. Perhaps holders of these options see that there is little downside to deferring exercise of the option, or perhaps they are experiencing similar drawbacks that others have to annuitization. Page 11 of Guaranteed Living Benefits: Before the Meltdown.

3) Immediate Variable Annuities (IVA)
Spurred in part by the success of GMIB's, a great deal of effort (including special income marketing and sales organizations) was put into IVA's with Guaranteed Payout Annuity Floors (GPAF) and other patches towards the end of

© 2011 Society of Actuaries, All Rights Reserved

the 20th century. Nevertheless, IVA's have not fared well.



It is interesting to note that the 1% or so cost of GPAF's was seemingly a major deterrent at that time. Complicated structures were another.

4) Guaranteed for Life Withdrawal Benefit (GLWB)
This benefit, which was introduced a few years into the 21st century, has become very popular (91% of VA's had such a benefit, and 44% had elected it by 2007 Valuation, hedging and demand for ruin-contingent life annuities (RCLA)). It guarantees a stated minimum income for life of generally 4-7%, while allowing equity investment, access to investment funds, and passing on investment balances on death. It is thus appealing to distributors as well as consumers within an investment-oriented framework but fearful of the downside risk of running out of income. Insurers have introduced many variations in benefits and even added them to Indexed and fixed deferred annuities in attempts to capture market share.

5) Indexed annuities
Though not a post-retirement product, per se, these products were first developed in the '90's and have captured a significant share of sales to retirees. They are attractive because they hold out the prospect of the rewards of the stock market while protecting against market declines. However they have had a number of stigmas associated with them, including high commissions and surrender charges, low guarantees, confusing benefit structures, and governmental

© 2011 Society of Actuaries, All Rights Reserved

concerns. Some of these "stigmas" have been cut back, but the SEC recently again moved to regulate them as securities and potentially hurt their viability. That recent move, though, has again been averted.

6) Longevity insurance
A more recent development has been a payout annuity, similar to an immediate life annuity, under which payments don't begin for a number years, increasing the payout to purchase ratio leverage. This concept has been brought into play as a sort of DB payoff at retirement under a DC funding plan, but more dramatically as standalone pure protection for income after say age 85, allowing financial management of the rest of one's funds to focus on just the period up to the commencement age.

As such, this type of product is beginning to be incorporated into a number of approaches to post-retirement financial planning. For example, The Thrive® Income Distribution System presents a life annuity with a certain period as a combination of an immediate annuity certain followed by longevity insurance commencing at the end of the term certain. Financial Engines, Inc., the largest Registered Investment Advisor (RIA) in the U.S., focused to date on the accumulation stage, appears to be thinking of incorporating longevity insurance into a lifetime income package. Response 682 to Request for Information Regarding Lifetime Income Options for Participants and Beneficiaries in Retirement plans There is no indication to-date, though, of significant sales for this still relatively new product.

b. Decumulation financial planning programs
Post-retirement finances are about decumulation – using accumulated funds, beyond those covered by annuity type payments such as from Social Security, DB payouts, and immediate annuities, to finance outlays for living. Planning and managing decumulation involves many factors beyond just investment product positioning within the investment risk/reward sphere of the accumulation phase. It has thus given rise to the development of a still evolving variety of approaches and rules of

© 2011 Society of Actuaries, All Rights Reserved

thumb for post-retirement financial planning and management. These are not products, per se, but are key to the product story.

One of the foremost rules of thumb is that the maximum safe income withdrawal rate be no more than an initial 4-4.5% of assets (the withdrawal amount adjusted yearly for inflation). Making Retirement Income Last a Lifetime shows the analyses, as well as how it can be improved by SPIA's. Guidelines for Withdrawal Rates and Portfolio Safety During Retirement and A Smarter Form of SWiP introduce refinements into this rule for variations according to circumstances. The 4% Rule—At What Price? questions the efficiency of the 4% rule.

A study in support of an income management program an insurance company featured showed that Including Fixed Income Annuity in a Retirement Income Portfolio May Increase Long-Term Wealth as Well as Retirement Income Security, and Immediate Annuities and Retirement Income Portfolios shows the advantages of incorporating SPIA's into various income/net worth segments of the market. Optimizing the Retirement Portfolio: Asset Allocation, Annuitization, and Risk Aversion also finds that life annuities are favorable for risk averse individuals. How to make your money last summarizes the pros and cons of lifetime annuities or not. Analyzing the Pros and Cons of Retirement Income Strategies examines VA's with GLWB's against lifetime annuities and income generating mutual funds with the following – it depends – results:

MEETING RETIREES' EXPECTATIONS FOR A 25- TO 30-YEAR RETIREMENT

Retirees' Expectations	STRATEGY 1 Mutual Funds with Automated Income Payments		STRATEGY 2	STRATEGY 3	STRATEGY 4 Combinations of Mutual Funds and Income Annuities		
	Endowment-Style Mutual Fund	Self-Liquidating Mutual Fund	Variable Annuities with GMWB Rider	Income Annuities	100% Mutual Funds	30% Annuity 70% Funds	85% Annuity 15% Mutuals
Automatic inflation-adjusted income	◒	◒	⊖	●	●	●	●
Full income for life	◒	⊖	◒	●	⊖	◒	●
Potential account value growth	●	◒	◒	⊖	●	◒	◒
Predictable legacy benefit	●	◒	◒	⊖	◒	◒	◒
Simple to understand	◒	◒	⊖	●	●	◒	●
Ability to change strategy	●	●	●	⊖	●	◒	⊖

● Best ◒ Average ⊖ Worst

© 2011 Society of Actuaries, All Rights Reserved

Another approach that is popular is dividing investment strategies into buckets of time. The Income for Life Model is a front-runner in this approach. A recently introduced modification is presented in Introducing the Sequent Income Model™.

The Retirement Income Industry Association (RIIA) has developed an advisory process that expands on the traditional framework to focus on an income floor and include advice on the human capital, social capital, and financial capital of the client. Retirement: A Field in Flux.

Moving from financial planning to financial life planning goes even further in suggesting the exploration and integration of life questions into planning, most especially in the highly emotion charged retirement and beyond part of life.

Retirement Income Software Needs Sprucing Up: Experts point out limitations in financial planning software as follows:

PROFESSIONAL SOFTWARE

SUGGESTED IMPROVEMENTS FOR USE IN RETIREMENT PLANNING

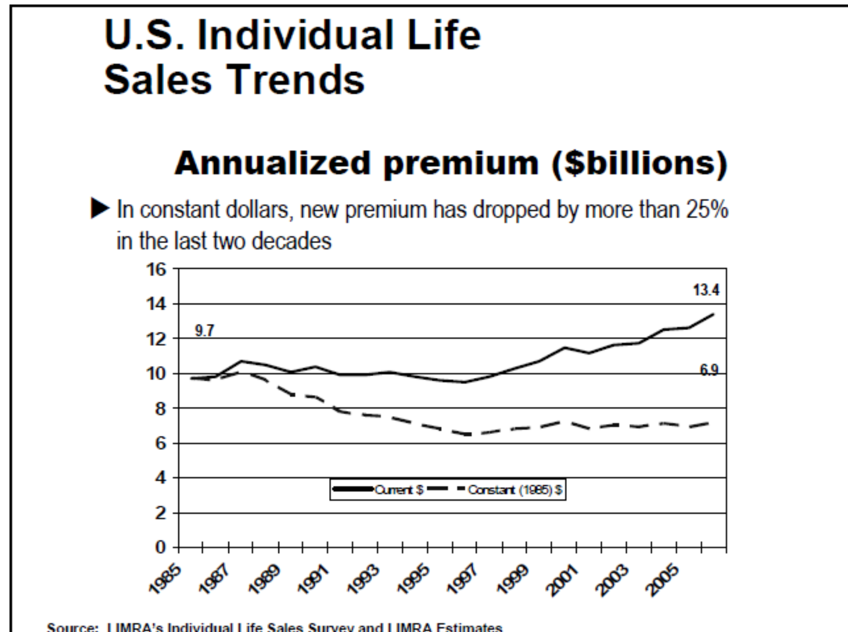
1. **Life expectancy.** Existing financial planning software does not treat life expectancy as stochastic. It often does not recognize or create a personalized estimate based on individual characteristics including family history, health, and demographic groups. An alternative to stochastic treatment is focusing on multiple scenarios.
2. **Annuities and income-generating products.** Existing software rarely recommends such products or helps the user to evaluate their pros and cons, even in situations where they clearly would be advised. It usually does not focus on the variability of life spans. An option would be a side program signaling products for consideration with some characteristics of the options.
3. **Housing values and risks associated with mortgages.** Existing software programs are very mixed in recognizing housing values, do not recognize the risks posed by a range of mortgage products, and do not adequately explore how housing fits into the big picture. This is an area for major improvement.
4. **Social Security.** While the age at which Social Security benefits are claimed and the level of those benefits are the most important aspects of retirement planning for many people, the existing software programs generally tend to focus on issues relating to investments.
5. **Masking risks.** Even the stochastic programs mask risks because they only treat rates of return on equity (and in some cases mortality) as risks. An evaluation is needed to see if existing stochastic models are adequate to help in thinking about adverse conditions.
6. **Rates of return.** Existing programs have a tendency to overstate rates of return. First, fees are often not considered. Second, individual investors tend to do less well than the market because of the timing of their investments.
7. **Pro equity bias.** Existing programs have a tendency to have a pro-equity bias, with greater investment in equities improving the measured chance of success.
8. **Economies of scale.** Some of the existing programs understate the resources a survivor needs because they don't take into account economies of scale in consumption. We estimate that one person needs about 75% of what a couple needs.
9. **Data entry errors.** Existing programs could do a much better job of checking for data entry errors and signaling unreasonable assumptions. In some cases, the errors occur because of difficulty in using the programs.

Source: Anna Rappaport, founder and principal of Rappaport Actuarial Consulting, Chicago, and John Turner, director of the Pension Policy Center, Washington, in a paper they presented to the Pension Research Council Spring Symposium 2009 in Washington.

© 2011 Society of Actuaries, All Rights Reserved

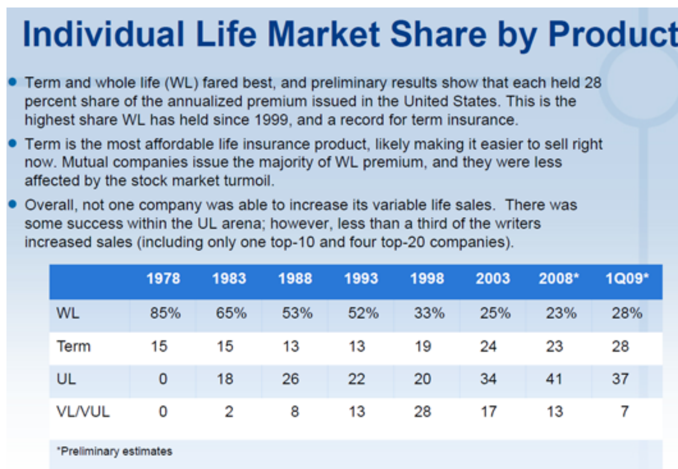
c. Life insurance

Annualized new life insurance premiums for all ages grew on average 4.6% from 1976 to 2007 That was Then … This is Now, but have been level to slightly down on an inflation adjusted basis in recent years.



Life & Annuity Industry Trends, 7th Annual Product Development Actuary Symposium, June 2007

The trend in product distribution has seen an increase in Term & UL, with Variable Life and Whole Life down.



Individual Life Market Share by Product

- Term and whole life (WL) fared best, and preliminary results show that each held 28 percent share of the annualized premium issued in the United States. This is the highest share WL has held since 1999, and a record for term insurance.
- Term is the most affordable life insurance product, likely making it easier to sell right now. Mutual companies issue the majority of WL premium, and they were less affected by the stock market turmoil.
- Overall, not one company was able to increase its variable life sales. There was some success within the UL arena; however, less than a third of the writers increased sales (including only one top-10 and four top-20 companies).

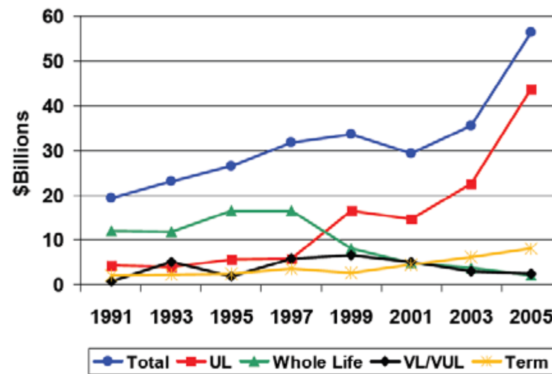
	1978	1983	1988	1993	1998	2003	2008*	1Q09*
WL	85%	65%	53%	52%	33%	25%	23%	28%
Term	15	15	13	13	19	24	23	28
UL	0	18	26	22	20	34	41	37
VL/VUL	0	2	8	13	28	17	13	7

*Preliminary estimates

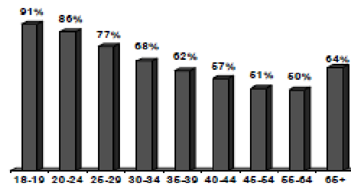
U.S. Individual Life Insurance Sales Trends, First Quarter 2009

© 2011 Society of Actuaries, All Rights Reserved

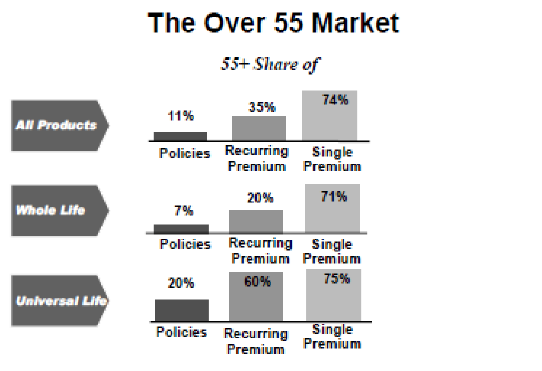
Sales to seniors have been up, derived from several market foci. The senior market has especially recorded gains in UL sales (by amount of insurance), where seniors buy higher face amounts, with secondary guarantees and second-to-die popular. [Expert Explains Life Sales Slump] 28% of U.L. premium sales were at ages 65-74 and 32% were at 75+ in 2007. [Universal Life Issues]



The percentage of large policies to males 65+ and single premium to people 55+ is also of interest

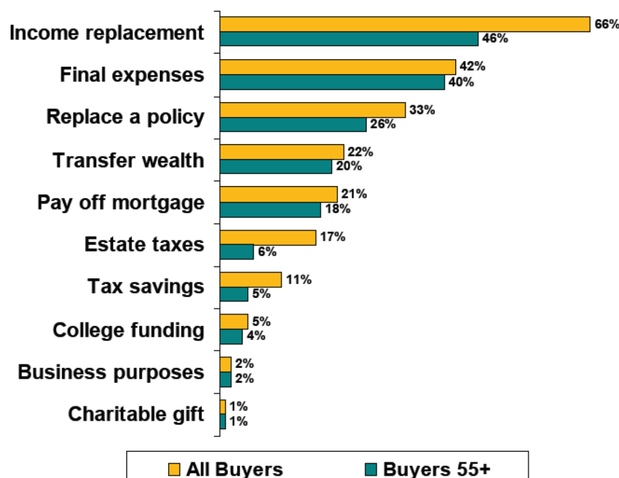


© 2011 Society of Actuaries, All Rights Reserved



Life & Annuity Industry Trends, Product Development Actuary Symposium, June 2007

Just as in the broad market, life insurance policies are used in a variety of ways in the post-retirement market. The four pillars of every successful personal economy:



1) <u>Income replacement</u>
   To provide income to a spouse or offspring where income is lost on the death of a primary income generating elder. One form of this is "pension maximization", where life insurance is purchased instead of a joint life option in a pension or in the purchase of an immediate annuity. An insurance policy on a single life is generally used, though a Reversionary Annuity,

© 2011 Society of Actuaries, All Rights Reserved

providing a lifetime income to a surviving spouse on the first death of their partner, can be an even better fit.

2) Final expenses
Smaller amounts provide for expenses such as for a funeral to ensure it and/or not put pressure on survivors. Simple life or term policies, often specially designed and marketed such as simplified or guaranteed issue graded benefit policies are often involved. Tired of pounding the pavement? Specialized pre-funding of funeral burial insurance policies have also been marketed in conjunction with funeral home associations.

3) Legacy
Similar to income replacement, but providing a broad rather than specific purpose death benefit, ensuring an inheritance to loved ones or a charity. This can "free up" assets so they can be used for the living needs of the retiree. Lower premium UL and even term policies are used. LTCI combination benefits (featuring "don't lose it, if you don't use it") are integrated into this type of sale by some products.

4) Wealth transfer
To efficiently pass on wealth to heirs, especially for HNW people, higher premium Survivorship Variable Universal Life (SVUL), Survivorship (SUL), often on a single premium Modified Endowment Contract (MEC) basis, have been used, though some are also sold with the idea that they might provide an alternative reservoir of funds if needed for income or other purposes. "Despite the uncertainty about the ultimate fate of the estate tax, survivorship sales ended the year 15% higher than in 2006" LIMRA: Individual Life Premium Up 8%

5) Asset protection
To cover at-death taxes or otherwise provide liquid funds needed at death (usually for substantial illiquid asset situations). Lower premium permanent life policies are usually used. Universal Life with no-lapse guarantees as well as SUL have been the most popular forms of policy for these purposes. Such policies have also been used in connection

© 2011 Society of Actuaries, All Rights Reserved

with charitable contributions with planning instruments such as Charitable Remainder Trusts.

Other post-retirement life insurance related subjects of note are:

- Life settlements
  Life settlements involve the purchase by a third party of life insurance policies for more than their cash surrender value from policyholders who have shortened life expectancies and value the cash settlement more than continuing with the policies to receive the death benefits. "Estimates of life-settlement purchases have ramped up from $2.5 billion of face amounts in 2003 to $10 billion to $15 billion last year [2004]. Private studies estimate 19,000 policies will have been bought in 2005, and 26,000 will be purchased in 2006." A big step up There was a dip in 2008 to $11.8 billion, bringing the total inforce to about $31 billion of face. It is further estimated that there may be another $160 billion of face suitable for purchase for perhaps $30-$35 billion. Conning: Life Settlements Slow

  These purchases are of a relatively small segment of inforce policies (Stranger Owned Life Insurance (STOLI) sales may have been the latest scheme, but they could affect mortality experience (offset by a bit better persistency). Stranger-Owned Life Insurance: Killing the Goose That Lays Golden Eggs! and Stranger originated life insurance: malignancy or not?), Their biggest affect, though, may still be the degree they put more dollars in the hands of seniors for other purchases. Moody's: Secondary Market Woes Bad For Life Sales

- Premium financing
  Besides STOLI, premium financing is used to finance life insurance where income is limited and assets are deemed illiquid. It is often used in business situations, and can also come into play in individual senior sales.

In sum, though, life insurance hasn't been integrated into most of the approaches to post-retirement income planning.

© 2011 Society of Actuaries, All Rights Reserved

d. Long-term care insurance (LTCI)
Long-term care cost is a major post-retirement risk faced by all people as they age. Yet, despite extensive marketing and sales efforts over more than 30 years and the aging baby boomers, only a little more than $10 billion ($8.6 individual and $1.7 employer sponsored) LTCI premium was inforce as of the end of 2008 – less than 10% of the eligible market. 2008 sales were $600 and $63 million respectively for individual and employer sponsored policies, with individual sales down since the turn of the century and employer sponsored sporadically up

An overview of the evolution of LTCI product offerings is worth noting.

The earliest LTCI products were developed in the '70's to cover the potential cost of chronic stays in nursing homes, which coverage had been excluded under Medicare. In the '80's the product offerings were broadened in various proportions into comprehensive coverage to also cover home health care (HHC) costs and then assisted living as it developed for chronic intermediate care needs. One form, HHC only insurance, fell pretty much by the wayside at the turn of the century as insureds needing care disproportionately utilized home care. HHC coverage, though, is now included "comprehensively" in 99% of employer sponsored LTCI of the leading manufacturer and most other LTCI purchases as well. Most LTC Buyers Pick Home Care: Unum

For the most part coverage has been offered in standalone policies. A Long Term Care Insurance Buyers Researched In Study shows an average age of about 65, with 2/3 of sales to women.

Benefit payment bases have variously been on a reimbursement, indemnity, and even cash basis, with other "basic" options as to benefit amounts, elimination and benefit periods, and inflation. Ancillary benefits have been included such as for equipment, day care, care management, provider discounts, hospice, and on and on, and there are many fine point policy definitions such as for benefit triggers.

© 2011 Society of Actuaries, All Rights Reserved

The cost of coverage is not insignificant broadly running over $500 a year for purchaser at the lower ages (40's) and coverage ranges (including inflation adjustments are especially expensive at young ages), to thousands for purchasers 60+. Moreover, the risk is remote; one that people can be/are in denial as to: whether or how much they will incur and whether their health insurance or Medicare benefits will cover such costs. This reluctance to insure is further fed by the possibility of being covered by Medicaid at lower net worth levels and the thought of self-insuring at the (High Net Worth (HNW) levels. Partnership policies are the latest possibility for lowering premiums by making shorter (generally 3 year) benefit periods more viable by anticipating qualifying for Medicaid with less impoverishment (lifetime coverage is decreasingly purchased even in non-Partnership policies).

Premiums on a guaranteed renewable basis, allowing insurers to raise premiums on a class basis (subject to restrictive state insurance department approval) are yet another negative to potential BUYERS. In recent years, mainly due to high persistency and low interest earnings, and even more recently higher claim rates compared to assumptions, insurers have in fact had to raise premiums, off-putting not only to policyholders but also potential buyers.

Tax and other legislative efforts to encourage the purchase of LTCI in large part to curb Medicaid costs seem to have had only marginal effects on sales.

A major alternative to standalone coverage has been a combination product wherein long-term care benefits are provided by drawing down death benefits of a life insurance policy, generally monthly over a 3-year period. An optional rider offers to continue the monthly amount after the death benefit is exhausted. Similar combinations with deferred annuities as the initial funding base, as well as some combined with immediate annuities and one flowing as a sort of guarantee issue conversion from a disability income policy, have also been offered. LTCI-life insurance combination premiums sales are estimated to have been $632 million in 2008, with 81% of it single premiums, with average single premium face amount of $163,000 and recurrent premium

© 2011 Society of Actuaries, All Rights Reserved

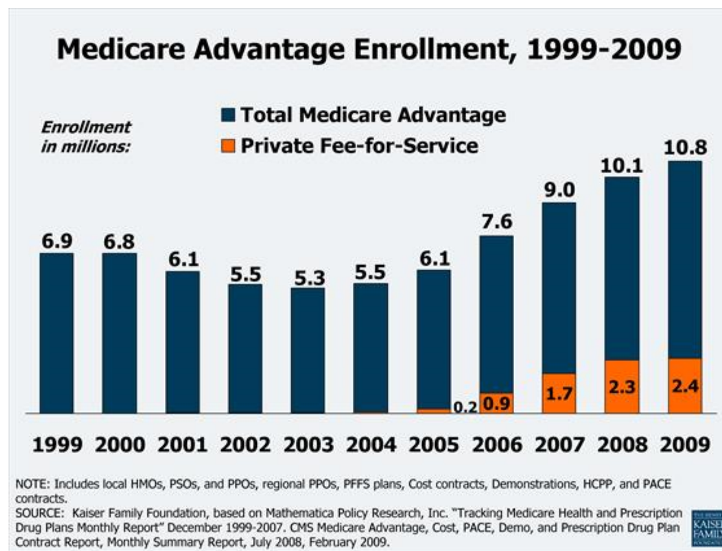
face amounts of $457,000. Data was not available for the relatively small to date annuity-LTCI combination market, though that market is hoped (LTCI Finally Making Its Mark: The 2010 Long Term Care Insurance Market Study) to greatly increase with the tax preferences for combination products of PPA which became effective January 1, 2010. Annuity/Long-Term Care Insurance combination Products

Long-term care also hasn't been integrated into most of the approaches to post-retirement income planning.

e. Health insurance

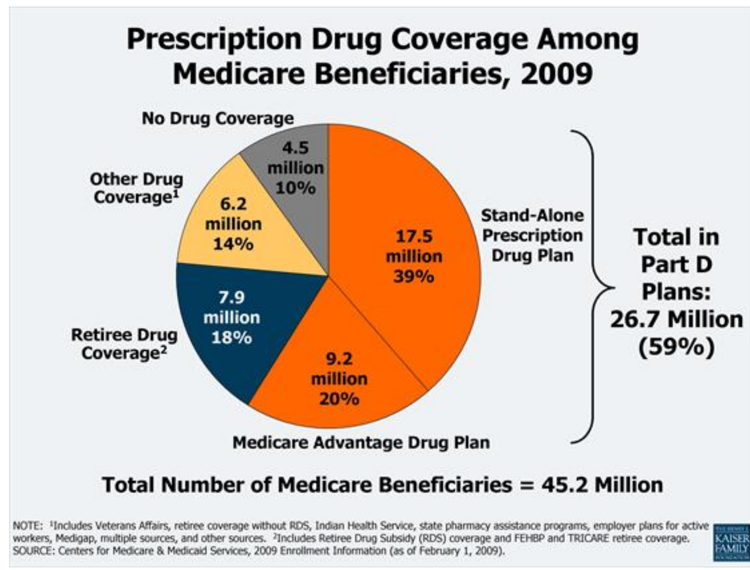
Employer paid retiree healthcare has declined as employers have cut back on increasing employee benefit costs.

To that extent Medicare coverage, the predominant health coverage of people over 65 not covered by employer provided retiree health care, has grown. And with Medicare's growth, the health coverages offered by insurance companies under Medicare and supplementary to it have grown. This includes Medicare Advantage "Choice" alternative plans, Medicare Supplemental policies that cover the premiums, deductibles, and coinsurance under Medicare, and the more recent Medicare D covering the cost of medicines. Sales levels and trends are shown in the following tables.



Kaiser slides - Medicare Advantage Enrollment, 1999-2009

© 2011 Society of Actuaries, All Rights Reserved



Kaiser slides - Prescription Drug Coverage Among Medicare Beneficiaries, 2009

TABLE 1. NUMBER OF INDIVIDUALS WITH STANDARD AND PRE-STANDARD MEDIGAP PLANS, AS REPORTED TO THE NAIC, DECEMBER 2004 THROUGH DECEMBER 2006

	Dec. 2004	Dec. 2005	Dec. 2006
All Medigap Plans	10,361,243	10,260,308	10,102,924
Percent Change from Previous Year		-1.0%	-1.5%
Standard Medigap Plans	8,501,195	8,600,575	8,744,184
Percent Change from Previous Year		1.2%	1.7%
Pre-Standard Medigap Plans	1,858,940	1,658,785	1,358,660
Percent Change from Previous Year		-10.8%	-18.1%

Source: AHIP analysis of the National Association of Insurance Commissioners' (NAIC) Medicare Supplement Insurance Experience Exhibit, for December 2004 through December 2006.
Notes: The NAIC dataset did not provide the plan type for a small percentage of policies (.01%), therefore the sum of standard and pre-standard policies does not equal the total number of Medigap policies in force. The data for standard policies include Medicare SELECT plans, as well as those issued in three states (MA, MN, WI) that received waivers from the standard product provisions of OBRA 1990.

Trends in Medigap Policies, December 2004 to December 2006

The passage of The Patient Protection and Affordable Care Act (PPACA) will undoubtedly have some effect, most directly to an extent on Medicare Advantage Plans, but the effect looks limited.

Interestingly, only 5% of a small survey of people have switched Medicare carriers or plans. 80% say they are satisfied with their coverage, but 60% of those who have stayed with plans they dislike say it too confusing to try to change. Most Seniors To Stick With Medicare Plans

Vision and dental coverages not covered by Medicare or the supplements are also offered by insurance companies, as are cancer, critical illness, mental, and other ancillary coverages.

© 2011 Society of Actuaries, All Rights Reserved

These coverages are mostly sold through worksite or direct marketing, but are not major premium generators in total.

e. Property and Casualty coverages
P& C are major lines of business, and some of those coverages continue to be needed by seniors in retirement. Cross-Selling Can Add Life To Any P-C Agency's Growth

f. Non-insurance products & services
Non-insurance financial products and services at play in the post retirement market include:

- Stocks
- Bonds
- Treasuries
- Mutual Funds & Exchange-Traded Funds (ETF's)
- Options
- Bank savings and checking accounts
- Money-market funds
- Real estate
- Trusts
- Business and real estate loans
- Reverse mortgages
- Legal & tax services
- Credit cards

Many of these instruments are integrated into some of the approaches to post-retirement financial planning.

Though seemingly late to the post-retirement table, several non-insurance company products have been increasingly rolled out focused on the post-retirement market.

a) Target date funds
These funds are geared to grow more and more conservative as the target retirement date approaches.

b) Income funds
Fidelity and Vanguard have introduced non-guaranteed mutual funds geared to pay an income till the fund is exhausted, but

without guarantees. **Do annuity alternatives for income planning make sense?**

c) Inflation-adjusted bond income fund
A bond fund geared to pay out inflation-adjusted income for a term certain, though it provides no guarantees. PIMCO Real Income 2019 Fund A (PCIAX)

d) Stand-Alone Life Benefit riders (SALB)
With GLWB's popular, insurers, seeing the potential in the mutual fund sphere, and the mutual funds seeing the same, have resulted in the introduction of GLWB-like riders on mutual funds. Time Is Right for Standalone Lifetime Benefit (SALB).

e) Reverse mortgages
These mortgages, which require no mortgage payments until the owner dies or moves from their home and are available to people 62 and over, are beginning to gain more traction, with 31% of the 350,000 issued in their 21 year history issued in 2007. Reverse Mortgage Problems Linked To Annuities At Hearing

g. Additional product considerations
Other broad product-related issues are worth noting:

1) Patents
There are increasing number of patents being applied for and issued related to insurance and finance An Update on Current Patent Activity and a recent law suit awarded a $13 million infringement of a patent related to GLWB's Lincoln Financial wins latest round in variable annuities methodology patent case

2) Taxes
An Internet based company is offering a service to maximize after-tax drawdown of assets in retirement. SunTrust is First to Launch LifeYield ROI™

Tax deferral is somewhat less potent if it is in effect for fewer years. However, increasing longevity and possibilities for passing on the advantages of tax deferral come into the post-retirement product picture.

3) Competitiveness
The Mortality and Expense charges (M&E) in variable annuities are viewed as problematic by regulators, distributors, and to astute consumers (most consumers are overwhelmed by financial product complexity). A few companies have begun scaling these fees back and focusing on asset management for profitability, but M&E charges remain a thorn and influence the broader picture of the costliness of insurance.

4) Public perceptions
The public has many negative pre-conceptions of the insurance business and its offerings. This is a major roadblock to sales and services. Money for life: The hidden costs Household demand for variable annuities Beating the bear with annuities: Are you leaving money on the table? Only One-Quarter of Americans Say Banks are Honest and Trustworthy Public Attitudes Toward Different Industries

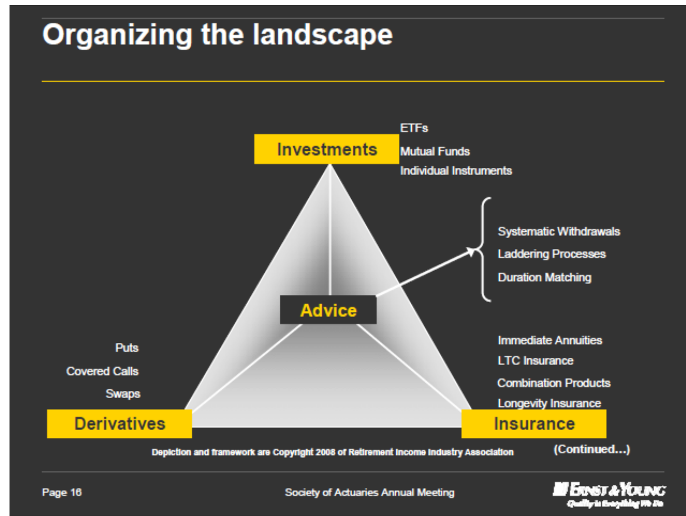
5) Risk
Risk avoidance is of course what insurance offers consumers through pooling and is quite desirable in the post-retirement financial management. Such offers of risk coverage must necessarily be manageable, with evolving longevity, health, and investment risk of particular need for scrutiny for this market.

6) Research institutes
Industry Institutes are doing some fine research, but it is hard to measure their use by the industry or beyond.

4. Distribution
Distribution – marketing and sales - is as, or even more, significant as product in regard to the industry's positioning relative to the post-retirement market.

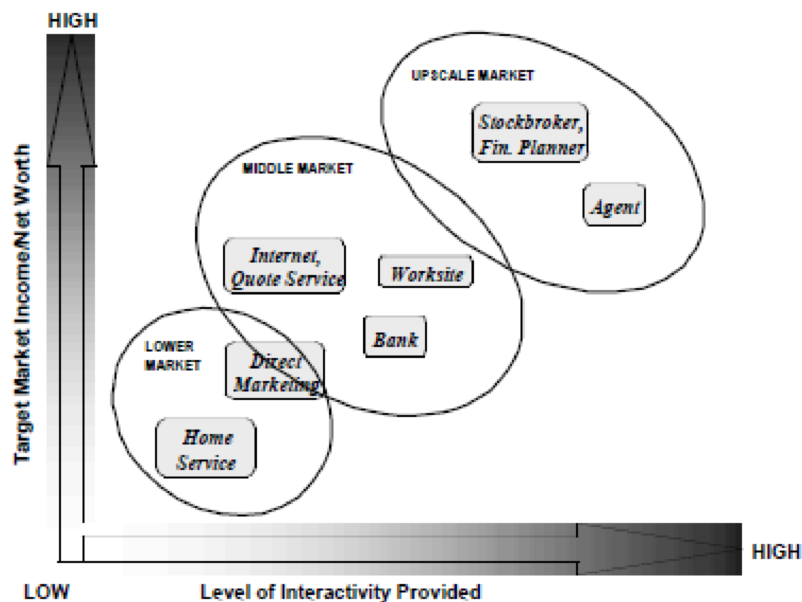
The roll of distribution, especially in terms of financial management, might be depicted as being in the center as follows:

© 2011 Society of Actuaries, All Rights Reserved



[2008 Society of Actuaries Annual Meeting, Retirement-New Products & Approaches]

a. Sold vs. buy vs. get help
The old adage is that insurance is sold, not bought, and thus salespeople have been key to the insurance business. That adage may also apply to providing other financial instruments in varying degrees depending on their complexity, consumer grasp and needs, and economies of delivering the products as depicted in the following graph:



© 2011 Society of Actuaries, All Rights Reserved

Source – NewsDirect Newsletter of NM Section of the Society of Actuaries - 1999

As stated above, the industry and its distribution system have migrated towards an investment orientation. However, the upper circle still predominates.

b. Channels

Trends in Distribution presents a good basic overview of the trends in distribution in terms of affiliate agent and third-party distribution manpower, product, and profitability shifts for insurance and annuities. In particular, it cites the shrinking of affiliated agents from 250,000 to 150,000, and the rise of third party distribution.

RISE OF THIRD-PARTY DISTRIBUTION

- Third-party channels (independent life agents, wirehouses, regional BDs, IBDs, IFAs/IFPs, bank reps) growing faster than career channels and taking share
- Intermediaries (e.g., BGAs) consolidating market power and displacing carriers from large parts of the value chain by offering value-added services to third party reps
- Third-party channels forcing carriers to compete for shelf space and sales with more attractive commissions, pricing, and product features
- Third-party channels generally offer lower quality business (e.g., persistency, non-taken rates)
- Third-party channels are quick to exploit errors in product design (e.g., mispricing, product features)

- Profitability of new business through third-party channels is very low
- Competition increasing
- Carriers are increasingly commoditized
- Growth of third-party channels and intermediaries convinces many high-performing career reps to "go independent"

6

It is reported in Fee-Based Advisors Say Current Economy Makes Savings Accumulation Through Tax Deferral More Important than Ever that "retail assets in the Registered Investment Advisors (RIA's) space have reached more than $1.4 trillion and are growing at an annual rate of 15%, one of the fastest-growing segments in the industry.

© 2011 Society of Actuaries, All Rights Reserved

A Strategic Analysis of the U.S. Life Insurance Industry similarly points to the expansion of mostly annuity sales through third-party distributors.

The following charts of sales by channel show expansion of distribution: variable annuities through non-insurance channels, including direct, though not RIA's – RIA's Remain Skeptical About Annuities; fixed annuities through banks; but not much for life insurance.

TABLE 3

2008 INDIVIDUAL ANNUITY MARKET SHARE BY DISTRIBUTION CHANNEL*

	Variable	Fixed	Total
Banks	$18.8	$32.8	$51.6
Career agents	35.6	16.6	52.2
Direct response	16.3	2.6	18.9
Financial Planner/ Indep. Broker-Dealers	43.4	5.6	49.0
Independent agents	9.1	37.6	46.7
Stockbrokers	28.7	6.8	35.5
Other	3.7	7.4	11.1
Total	$155.6	$109.4	$265.0

* Estimates in billions. Source: LIMRA International, Windsor, Conn.

FA Sales Skyrocketed In '08 While VA Sales Plunged: LIMRA

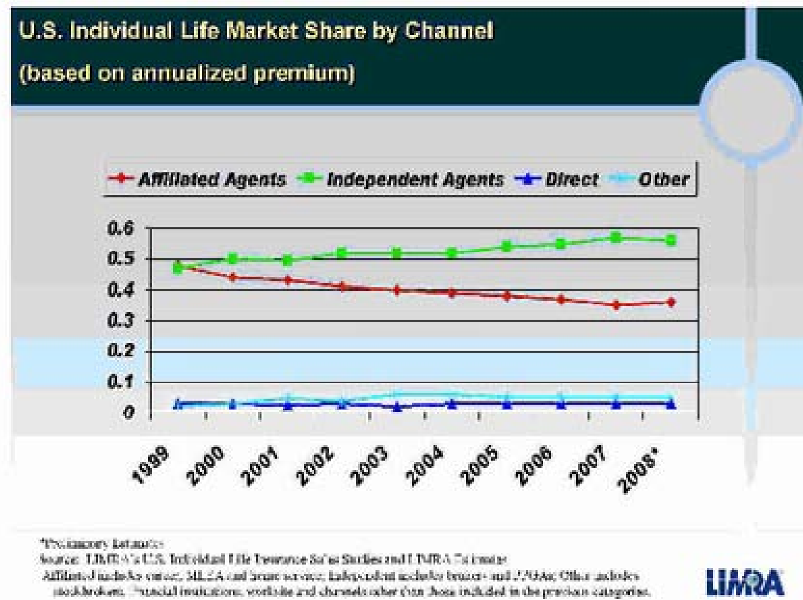
The channel mix for immediate annuities as of 2004 was

Distribution Channel	Percentage
Career Agents	36%
Independent Producers	42%
Wirehouses	3%
Large/Regional Broker-Dealers	9%
Independent Broker-Dealers	4%
Banks	5%
Other	1%

Focus on Immediate Annuities

© 2011 Society of Actuaries, All Rights Reserved

The dominance of career and independent agents is also seen in life insurance market share by channel:



It is also noteworthy that over 70% of career agents, and 60% of independent agents are over 50 [Issues Facing Distribution Leaders]

The question is – How successful is expansion to other channels, given the amounts these channels funnel into other financial instruments ([Surveys, Target Dates, and More] - see the graphic link in the article in particular and the lower profitability of selling through these channels)?

c. Practices of retirement income advisors
Will even High Net Worth (HNW) targeting insurance people deal with the planning involved in the post-retirement market as reported in the following chart from [Best Practices for Retirement Planning].

© 2011 Society of Actuaries, All Rights Reserved

Retirement Planning vs. Accumulation Planning

Retirement planning is…

- more comprehensive and broader in scope
- more complex
- client consolidation and aggregation
- focused on multiple time horizons
- more focused on risk and cash flow
- process over products
- more emotional
- more referrals
- more uncertain
- more time

Source: GDC Research and Practical Perspectives

3

Moreover, even beyond the complications noted above, the study research showed that advisors in this market go well beyond just financial advice by the very multi-dimensional nature of retirement (a similar orientation is seen at a retirement income site of an insurer myretirementshop, a marketer Mature Market Experts, and AARP.

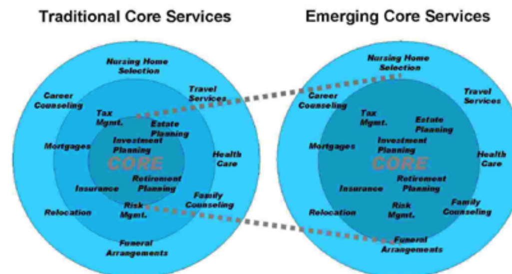
5 additional charts of practices from the study are also fascinating -

Advisor Cores Services are Expanding

To meet client expressed and unexpressed needs, advisors are providing services beyond creating income streams which address the breadth of technical and emotional issues that relate to longevity

Traditional Core Services

Emerging Core Services



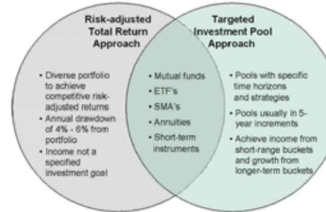
Source: Advisor Best Practices Report: *Retirement Income and Transition Support* by GDC Research and Practical Perspectives, Q3 2008

8

Approaches to Generating Retirement Income

- No universal method used to meet client retirement income needs
- Almost split evenly with regard to the investment approach
- Not seeking top performance
  - Looking for consistent returns and shun performance focused clients
- Stay within their comfort zone and staying the course
  - Use the same investment vehicles from their accumulation strategy
  - But are expanding their investment vehicle tool kit
  - Keeping committed…unless client is wavering

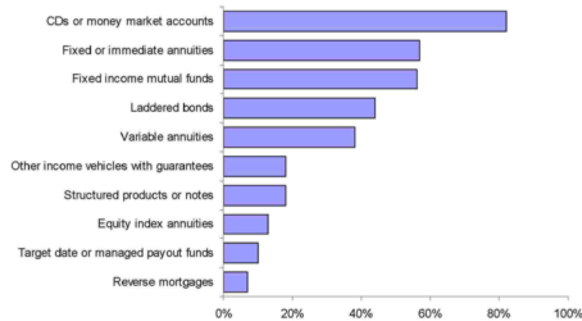
Retirement Income Approaches



Source: Advisor Best Practices Report: *Retirement Income and Transition Support* by GDC Research and Practical Perspectives, Q3 2008

11

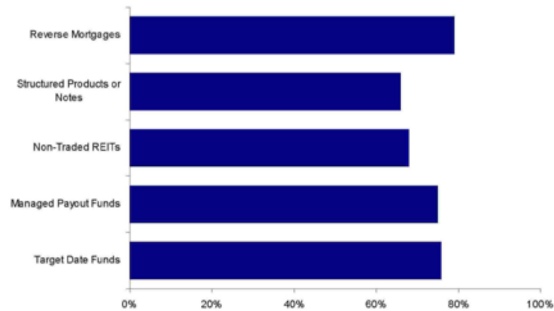
Products Used to Provide Income Needs



Source: Examining Best Practices in Constructing Retirement Income Portfolios by GDC Research and Practical Perspectives

17

What Products Advisor Aren't Using

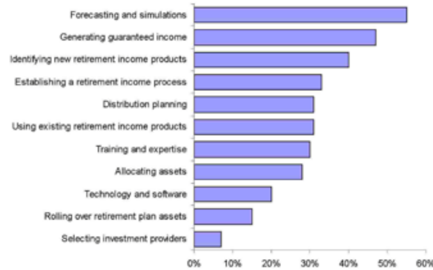


Source: Examining Best Practices in Constructing Retirement Income Portfolios by GDC Research and Practical Perspectives

18

© 2011 Society of Actuaries, All Rights Reserved

Advisor Retirement Income
Support Needs



Additional highlights of the research include:

- Financial Analyst (FA) resonation with a bucket approach as an adaptation of accumulation planning (though total return and income floor are also used by many Income-Oriented Advisors Seek Validation: Survey);
- Love/hate feelings about immediate annuities;
- A rethinking of assumptions because of the financial turmoil;
- A more relational advisory and comprehensive service roll;
- Fees often still on an Assets Under Management (AUM) basis. The New Retirement Advisor

Another study, Wanted: Better Income Plan Tools, confirms much of these findings, including the shift from asset accumulation to asset distribution and to immediate annuities, but still with a preference for systematic withdrawals and asset allocation.

A David Macchia Blog discussion between 2 distributors who are marketing bucket approaches puts some of this into a conversational format.

But interestingly, two major consulting firms that developed excellent financial planning software packages using scenario projections that included health and death needs, were unsuccessful in trying to sell the packages, the suspicion being that the software concepts were judged by marketers to be too sophisticated for their accumulation oriented distributors.

d. Other major distribution issues of note:

© 2011 Society of Actuaries, All Rights Reserved

- Professionals who clearly try to sell something, such as stockbrokers, real estate and insurance agents, are less trusted than those who do not. Most Trusted Professionals to Give Advice

- Compensation bases – commissions, or fees as a percentage of assets or per hour; suitability vs. fiduciary standards; and designations are major regulatory as well as market issues. Wary Investors Are Seeking Out Objective Voices Independent Advisers Are In Demand, but Picking One Means Homework and The Fight Over Who Will Guard Your Nest Egg

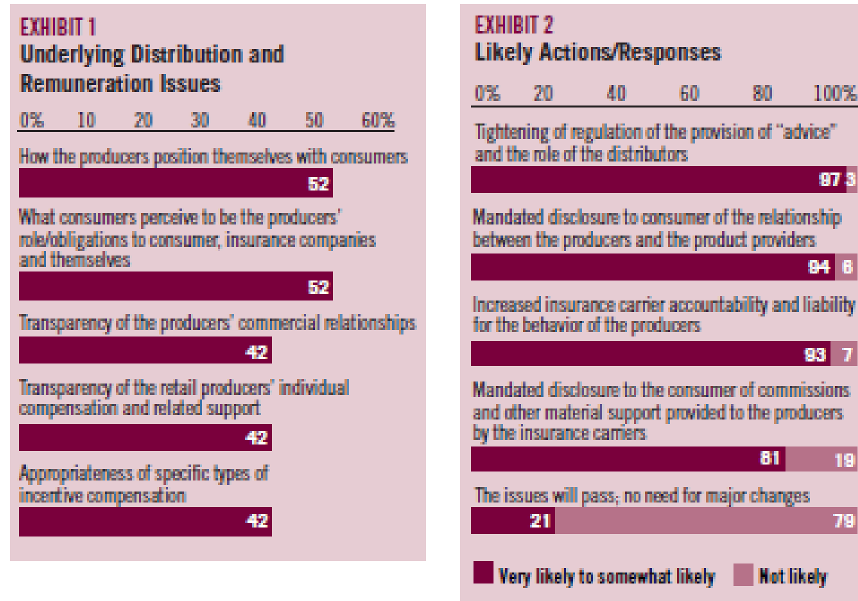
- The potential conflicts involved in who may be an advisor to employees in 401(k) plans, including employer/sponsor fiduciary risk, is still up in the air, and is a difficulty in educating employees Labor Department nixes Bush OK to let brokers advise 401(k) plans

- The Value of Financial Planning study: Consumer Attitudes and Behaviors in a Changing Economy shows the value of comprehensive financial planning and of an advisor, both in terms of feeling and being financially secure.

- Selling to seniors is tainted – STOLI, What happens after the free lunch, and Reverse mortgages and CV life insurance -- A lawsuit in waiting

- The following list of 2005 distribution and regulatory issues and predictions by insurance company CFO’s is of interest -

© 2011 Society of Actuaries, All Rights Reserved



Life insurance cfo survey #10: distribution issues

- LIMRA reports that while financial advisors see retirement income planning taking a more prominent roll in their businesses, Financial Advisors Say Guaranteed Income Products Too Complicated—Want More 'Explainable' Products for Their Clients

5. The Internet

The Internet is already a very major force in business and society, and pretty universally utilized, though differently across the generations, with even those 65-69 reaching almost 60% usage by early 2008. **Generations Online in 2009** It has revolutionized many aspects of life, e.g. online banking; access to information, participatory entertainment, etc., and has been hugely successful for many businesses, with Google, Amazon, Facebook, Twitter, etc., leading the way.

The question is – Where is the Internet finding traction in the insurance and financial services business? How to attract online consumers to your website you're your products gives some feel on the "marketing" side to date – providing information.

One could say that the Internet has, as in other complex matters such as medical diagnoses, given consumers the opportunity for self-education as to insurance and financial matters, and for many –

© 2011 Society of Actuaries, All Rights Reserved

particularly the self-directed - it has likely helped. Attempts at simplification help too. But financial product complexity by its very nature, with its many wrinkles, distrust, commercialization, and decentralization, and people's just plain mental blockage when it comes to financial matters and avoidance when it comes to spending for long-term protection, compromises the Internet as a direct path for extensive insurance selling to date. Indeed, financial Internet successes seem to be service oriented and/or simple, such as Mint.com.

As indicated in the article noted above, there have been some sales of insurance through the Internet, though they have predominantly been sales by brokers using the Internet for quoting and selling commodity type products (products that consumers buy without having to be sold such as term life, auto, home, and health). Often such sales integrate call center and even face-to-face agents in some cases. When looking for insurance which would you do online? shows people buying more than a third of the time; their reasons, especially the simplicity of the process, are worth noting. Will Online Financial Planning Catch On? describes recent rollouts of technology streamlined less expensive financial planning for the middle market.

Channel conflict has been a major factor in the relative dearth of attempts at direct selling by most insurers. The growth of fee-based planners, though, has spurned some potential breakthroughs for direct sales by insurers from their websites, recently even for a high-end simplified low fee tax-deferred variable annuity. Assistance with post-retirement financial planning is also being offered, but calculators such as Evaluate your retirement goals and develop a clear plan are answer-oriented and 401(k) experience has shown that most employees don't use even good employer-purchased (free to employee) calculators.

The current social networking craze is also raising questions of how insurers might use this "word-of-mouth" (sounds like "referrals") medium to advantage. This is especially enticing in the to date salesperson-based consumer-contact nature of insurance. Salespeople-based distribution is ablaze trying and promoting it, though it is still too early to tell how it will play out, including

© 2011 Society of Actuaries, All Rights Reserved

regulations for registered representatives in regard to advertising requirements. The Challenges of Using Social Media in Business (click to page 46) discusses the hesitations of insurers, including the lack of business success to date. Anecdotally, though, Vanguard seems to be generating some good interactions on Facebook Vanguard Blazes a Social Media Trail for Mutual Fund Firms and TIAA is reportedly getting participation in its myretirement.org community discussion forum Should Annuity Firms Care About Social Media? and its Twittering TIAA-CREF's TC_Talks Debuts on Twitter, but both of these companies have niche consumers.

Some insurers are also pushing technology – one insurer offered an online series included educational articles and webinars designed to help financial professionals build their business through the use of instant online communications such as "email marketing, blogs, social networks, and much more".

By and large, Social Technology Strategies for Insurance and Other "Boring" Brands sums the problem up for insurance – it's boring and New Technologies Simplify Life Insurance Sales and Creates Opportunities For Work At Home Virtual Ag says it needs simplification. Providing services such as depositing a check from an iPhone Bank Will Allow Customers to Deposit Checks by iPhone is clearly not where insurance presently is in the technology revolution.

The Internet is, though being efficiently and effectively used by marketing organizations, including insurers, to reach their primary consumers– their salespeople, in a b2b modality. Leads, webinars, website creation, sales tools, dynamic spreadsheets, paper work simplification, and contacts are just a few of the ways in which salespeople are being reached and helped using the Internet, e.g. Brokers International.

F. Government

Governmental initiatives of note for the post-retirement market include:

1. Funding programs
   a. Entitlements

Medicare, Medicaid, and Social Security face serious funding problems, and Part D of Medicare, Medicaid, Medicare Advantage, and claim control also have particular problems. Pre-retirees are fairly skeptical about these programs, perhaps overly so about Social Security.

It seems pretty clear that the government will continue to support these key programs, albeit at least some shaving looks inevitable. Attempts to better assist with long term care are also ongoing, including broad research proposals by the Urban & Brookings Institutions. **The Future of Long-Term Care: What Is Its Place in the Health Reform Debate?** The Community Living Assistance Services and Supports program (CLASS) portion of the Patient Protection and Affordable Care Act (PPACA) and certain changes in Medicaid qualification are examples of the government trying to provide base coverage.

b. Tax Incentives
Over time the IRS has encouraged savings under qualified retirement programs. The most major have been:

1978 » The Revenue Act of 1978 created new Section 401(k) retirement plans and Simplified Employee Pensions (SEP's).
1981 » The Economic Recovery Tax Act established "universal" IRAs for all workers.
2001 » The Economic Growth and Tax Relief Reconciliation Act (EGTRRA) of 2001 expanded retirement savings opportunities for workers.
2003 » The Jobs and Growth Tax Relief Reconciliation Act (JGTRRA) provided mutual fund shareholders with the benefits of lower tax rates on dividends and capital gains.
2006 » The Pension Protection Act of 2006 (PPA) and the Tax Increase Prevention and Reconciliation Act provided incentives for investors and the purchase of LTCI.

Pending bill H.R. 2748, The Retirement Security Needs Lifetime Pay Act of 2009 proposes to exclude 50% of income

© 2011 Society of Actuaries, All Rights Reserved

payments, up to $10,000, from tax, qualified longevity insurance from minimum required distributions, and taxation of annuitizations. A similar bill is still also pending in the Senate.

2. Supervision and Regulation
   Supervision and regulation by various governmental agencies, though necessary and helpful in the long run, are often onerous and faulty in a difficult task. NAILBA Speaker: Help Us Face Threats, t

   a. Product approval
      Though restrictions abound, government, particularly state oversight of insurance, has generally been supportive of innovations such as longevity insurance and living benefit guarantees.

   b. Suitability
      FINRA (The Financial Industry Regulatory Authority, formerly the NASD), the SEC, & the states have been hard on variable and indexed annuities for seniors **Variable Annuities: Beyond the Hard Sell** ; **NAIC Alert: Annuities and Senior Citizens**; page 8 of Communications With the Public on illustrations of tax deferral. FINRA even podcasts about annuity concerns FINRA Podcast - Deferred Variable Annuities.

      FINRA's investor advice page, Smart Investing, doesn't include annuities among the investments listed, and then only has negative blogs in its "Annuities and Insurance" link. As an "aside", their "Retirement calculator" on the Smart Investing page is fairly weak by most standards, e.g. it uses uniform (non-varying) annual yields; the Disclaimer language *"This model is provided as a rough approximation of future financial performance. The results presented by this calculator are hypothetical and may not reflect the actual growth of your own investments."* is miss-directive; there are no longevity warnings; and the calculation methodology isn't spelled out.

      Florida's Annuity Suitability Questionnaire is now quite similar to SEC requirements

© 2011 Society of Actuaries, All Rights Reserved

c. Advice
Employers see the need for advice on defined contribution plans Schwab Finds Advice Hunger, but advice from producers on 401(k) plans continues to be disputed in congress. House Bill Targets 401(k) Advice Moreover, FINRA asserts its jurisdiction over financial planning in general FINRA defends its authority over B-D's dispensing financial advice.

On the other hand, the Government Accountability Office (GAO) report on PRIVATE PENSIONS: Alternative Approaches Could Address Retirement Risks Faced by Workers but Pose Trade-offs, is a helpful in pointing out the risks under current retirement plan configurations and the need for advice.

The 2010 Departments of Labor and Treasury Request for Information (RFI) Regarding Lifetime Income Options for Participants and Beneficiaries in Retirement Plans and subsequent hearings suggests that there will be additional focus on lifetime income and annuitization in and/or from DC plans, at the very least from an educational perspective. The many fine submissions and testimonies present the varied perspectives involved.

The establishment of MyMoney.Gov as "the U.S. government's website dedicated to teaching all Americans the basics about financial education" is noteworthy, albeit in need of both pruning and cultivating.

.

d. Uniform provisions
At times federal governmental programs have been put in place to help people do the right thing for themselves, such as PPA to encourage combination annuity/LTCI programs, and automatic enrollment and investment under 401(k)'s. The requirements for uniform benefits of Medicare supplemental plans also help.

e. Solvency
At the state level regulation and supervision to ensure solvency has been reasonably protective, including the supervision of

© 2011 Society of Actuaries, All Rights Reserved

equity guarantee derivatives and capital and reserving standards. The move to Principal Based Reserving is a noteworthy seeming loosening in this respect.

f. Supervision

Supervision is a very hard job. There are lots of paper trails, particularly on the equity side, to avoid blatant fraud and abuse. Moreover, supervision to protect consumers on a marketing level is pretty much dependent on after-the-fact class action. But AARP, working with the North American Securities Administrators Association, Washington, exposed poor practices of free-lunch seminars Group Probes Free-Meal Seminars

G. The 2007-2009 financial turmoil and ongoing recession

The current financial turmoil has been significant, and its impacts to date warrants separate note. However, its course is still unfolding and many of its effects may ultimately prove to be transitory.

1. Effects on people

a. Financial

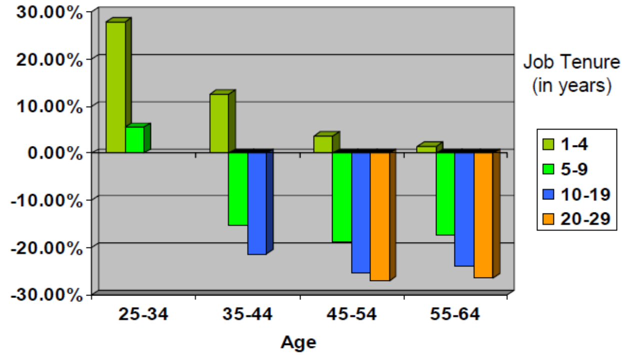
Obviously, the turmoil has cost many people substantial amounts of money for retirement and otherwise, some actual, some unrecoverable, and some "just" incurred to date (it could still go either way from here, but it still has its affects). The extent, implications, and ultimate effect of these losses vary widely. Most particularly from a retirement perspective, is the difference in affect between those near or already retired, and those more distant to retirement (the late and some early boomers)?

"Overall, American households lost about $14 trillion in wealth, more than their collective earnings from all sources of income last [2008] year." Obama Aides See Signs of Recovery but Say It Will Be Slow. For retirement, "retirement assets" (DC & IRA's were down $2.8 trillion (33%) from $8.6 trillion at their peak in 2007 to their trough at the end of the 1st quarter of 2009, and regained 1.3 trillion (23%) by the end of the 3rd quarter of 2009 Accumulations in Retirement Accounts, 2005 to 2009 .

© 2011 Society of Actuaries, All Rights Reserved

The following shows the change in average 401 (k) balances through the bottom in March 2009, with the biggest decreases in balances for boomers who have been in their plans the longest.

Change In Average Account Balances From January 1, 2008 – March 17, 2009 Among 401(k) Participants with Account Balances as of Dec. 31, 2007

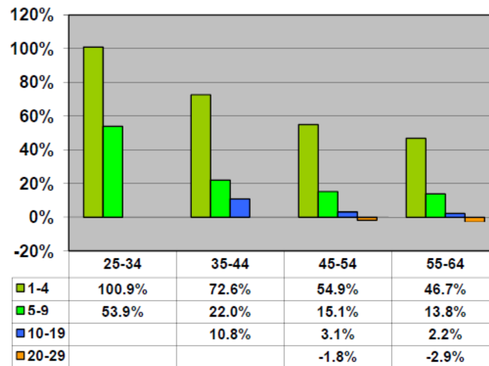


Sources: 2007 Account Balances: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project; 2008 and 2009 Account Balances: EBRI estimates. The analysis is based on all participants with account balances at the end of 2007 and contribution information for that year.

401(k) Balances and Changes Due to Market Volatility – 1/1/08 to 3/17/31/09

Balances, including new contributions, though, were mostly recovered by the end of 2009.

Change In Average Account Balances (by Age and Tenure) From January 1, 2008 – December 31, 2009 Among 401(k) Participants with Account Balances as of Dec. 31, 2007



	25-34	35-44	45-54	55-64
1-4	100.9%	72.6%	54.9%	46.7%
5-9	53.9%	22.0%	15.1%	13.8%
10-19		10.8%	3.1%	2.2%
20-29			-1.8%	-2.9%

Sources: 2007 Account Balances: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project; 2008 and 2009 Account Balances: EBRI estimates. The analysis is based on all participants with account balances at the end of 2007 and contribution information for that year.

401(k) Balances and Changes Due to Market Volatility – 1/1/08 to 12/31/09

© 2011 Society of Actuaries, All Rights Reserved

An update from mid- to year-end 2008 of a study of retirement vulnerability to outlive assets (or reduced standard of living) shows a somewhat bleaker picture, especially for those without pensions, as follows:

Changes in retirement vulnerability metrics of middle-income households without defined benefit plans from July 1, 2008 to December 31, 2008

			Probability of not outliving their financial assets (success rate)			Percent reduction in pre-retirement standard of living to increase success rate to 95 percent		
Marital status/gender	Income group	Retirement age	July 1, 2008	Jan. 1, 2009	Percent Change	July 1, 2008	Jan. 1, 2009	Percent Change
Married	$75,000	Near retirement	7%	4%	-42%	-49%	-51%	5%
Married	$75,000	Recent retiree	10%	6%	-44%	-38%	-41%	9%
Single female	$50,000	Near retirement	23%	18%	-19%	-38%	-41%	6%

Changes in retirement vulnerability metrics of middle-income households with defined benefit plans from July 1, 2008 to December 31, 2008

			Probability of not outliving their financial assets (success rate)			Percent reduction in pre-retirement standard of living to increase success rate to 95 percent		
Marital status/gender	Income group	Retirement age	July 1, 2008	Jan. 1, 2009	Percent Change	July 1, 2008	Jan. 1, 2009	Percent Change
Married	$75,000	Near retirement	43%	31%	-26%	-26%	-28%	9%
Married	$75,000	Recent retiree	69%	57%	-18%	-14%	-18%	24%
Single female	$50,000	Near retirement	73%	66%	-10%	-13%	-16%	17%

Updated Retirement Vulnerability Analysis: The likelihood of outliving their financial assets

It is also noteworthy that the affluent have been significantly affected, perhaps even more so than the less affluent. For instance, in a mid-2009 survey of households with net worth of over $1 million, 14% said they now considered their home equity a major part of their retirement savings (up from 10%), with home equity borrowing more active. The Nest As Nest Egg.

An update of the Center for Retirement Research at Boston College's National Retirement Risk Index also shows the increased vulnerability at all income levels.

TABLE 2. PERCENT OF HOUSEHOLDS 'AT RISK' AT AGE 65 BY INCOME GROUP, 2004, 2007, AND 2009

Income group	2004	2007	2009
All	43%	44%	51%
Low income	53%	57%	60%
Middle income	40%	40%	47%
High income	36%	35%	42%

Source: Authors' calculations.

The national retirement risk index: after the crash

© 2011 Society of Actuaries, All Rights Reserved

The NRRI and the House wasn't assumed to be mortgaged with a reverse mortgage, the 2009 NRRI would have been 9-10% higher in each income group and overall.

b. Fear & doubts

Even if the market, housing, labor, business, etc. come back, to what extent has there been and will there be:

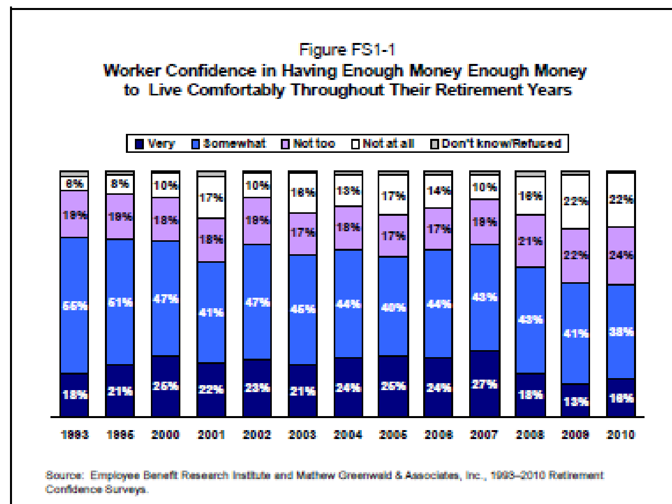
- Weakened trust in financial advisors, companies, and the future (the latter facing huge deficits, inflation, SS, Healthcare, Medicare, Medicaid, wars, taxes, global commerce, ecology); and/or

- A wake-up call about spending, borrowing; risk/reward, desire/need for financial help?

To a somewhat surprising degree, people haven't panicked as a result of the turmoil:

- Even right after the Lehman Bothers meltdown, most were not making any major investment moves, though there was an increase in feeling that retirement may have to be delayed. AARP 30 days of frenzy in the financial sector

- The 2010 Retirement Confidence Survey shows confidence about retirement declined to a new low of 46% of workers not too confident or worse.

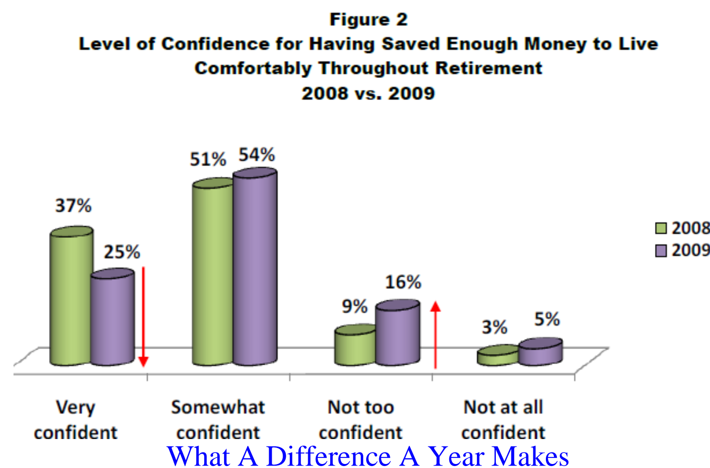


© 2011 Society of Actuaries, All Rights Reserved

- The report similarly shows retiree confidence at an all time low of 39%, and being able to afford medical and long-term care costs in retirement at even more dramatic lows of 51% and 61% respectively not being confident.

- But Time.com - Cartoons of the Week spoofs that the "good news" is companies are cutting back on 401(k) contributions: thus employees will have less to lose

- Pre- and post-retirement families with over $100,000, surveyed in February 2008 and then again in April 2009, were also less secure and confident, more conservative as to risk, and had cut back on their discretionary spending, but overall were still fairly confident about their financial situations -

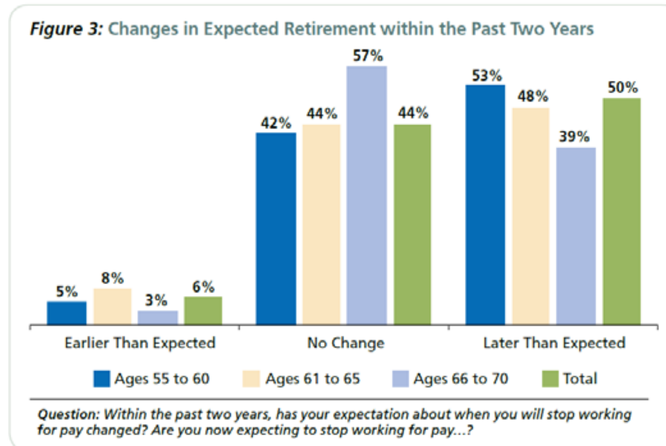


What A Difference A Year Makes

- Risk tolerance hasn't changed much, but risk capacity and perhaps preferences may have. Falling Markets and Risk Tolerance

- Many boomers are anticipating working longer, but it may not be that easy. New Realities of the Job Market for Aging Baby Boomers

© 2011 Society of Actuaries, All Rights Reserved



LIMRA Probes Consumer Attitudes seems similar about postponing retirement, but notes that only 10% have sought advice and that distrust is running high.

More than 2/3's of surveyed people 45-70 with $100,000 in savings are saying the "right" things – need to save; want income guarantees; if had such guarantees, would invest in the market. Pru Finds Retirement Savings Rebounding

c. Actions – What changes have people made?
Even in September 2008, 2/3's of workers over 45 were already saying they would need to retire later and spend less in retirement, only a third felt they could save more, and a quarter were working more just to make ends meet. Hispanics, women, those with just a high school education, and making less than $30,000 a year were particularly likely to have to at best delay retirement to a higher age. Retirement Security or Insecurity?

Most 401(k) participants have not been making many investment changes – for the most part they are continuing to contribute, are not withdrawing funds, and are not changing investment allocations. Retirement Saving in Wake of Financial Market Volatility

One might look at this "inertia" from an interesting potential-loss behavioral perspective. "Deciding" to not do anything was likely at least partially the effect of basic financial theory espoused in the marketplace of dollar cost averaging, long term investing, asset allocation, Modern Portfolio Theory, etc. But with all of this

© 2011 Society of Actuaries, All Rights Reserved

theory being thrown into serious question, why did so many people "stay the course"? Doing so was, at least in part, equivalent to investing in the market, which it is doubtful many would have initiated. But taken from a fear of loss perspective, their inaction and likely non-action can be seen as commonly motivated.

This is discussed further in Why Do Investors Sit Tight in 401(k)s? and Few Changed Investing Habits in 2008, Hewitt Reports

Employer Suspending the 401(k) Match: Look Before You Leap and Employers altering pension plan policies have also been of some concern.

The-Nest-As-Nest-Egg. sees early trends to using home equity for retirement needs.

Moreover, boomers with consumer debt in excess of $25,000 increased by 9% to 38%, with negative implications for retirement. Debt Rises for Boomers During Economic Crisis

The question is - Will We See an Investor Shift in Risk Tolerance in the Future? Back to leveraging? This could be a knee jerk reaction for some people faced with Rebuilding what was lost in 2008 -- how long might it take?

More recently, people are tepidly getting back in to the extent they were out. Cautiously, Small Investors Edge Back Into Stocks Others Got Anger? ShareOwners.Org Cites Investor Indignation. Half say they have lost faith and would reduce spending and build a cushion, and about 15% would seek an advisor and put some money in guaranteed income and low risk products. Some Will Talk To A Financial Advisor

A Study shows economy driving demand for guaranteed income products, yet annuity knowledge remains low.

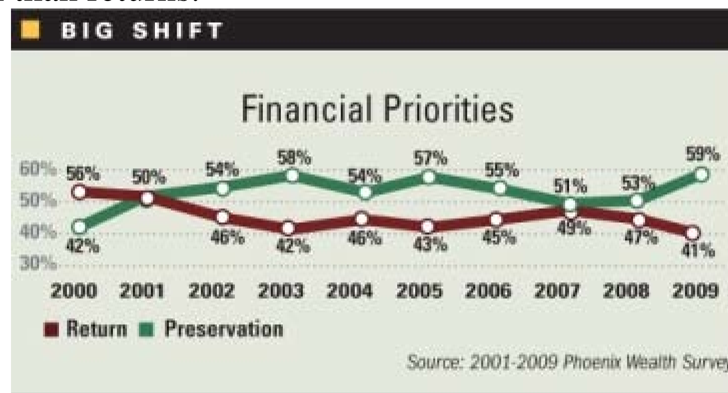
© 2011 Society of Actuaries, All Rights Reserved

Many Workers Will Outlive Retirement Savings and simply haven't done much about it.

Older workers have fared relatively better than younger workers in employment rates, partly a result of the trend in older-age participation. On an individual level, though, older workers have indeed also lost jobs. Recessions And Older Workers

It is to be noted, though, that near- and post-retirement people in higher education, a niche group with niche advisors, are taking responsible steps to manage their retirement finances such as saving more, and seeking advice and more secure investments. Retirement Income Is Key: Survey and Retirement savers respond to the market meltdown

High net worth individuals have also put more emphasis on preservation than returns.



In Recession's Wake, The Affluent Get Back to Basics

In any case, the Internet has and is playing a major role in people's knowledge and reactions to the recession. Recession Dot Net

2. Effects on the Industry
   a. The basics questioned
   As the biggest financial meltdown since the Great Depression, the meltdown drew into question basic financial theory.

   - 2008: The Historical Impact and Future Implications of Extraordinary Markets provides extensive technical analysis of the 2008 stock and bond markets, but little to no mention

© 2011 Society of Actuaries, All Rights Reserved

of the underlying housing, capital, and labor aspects of the turmoil.

- How much risk is acceptable? concludes that even if defined contribution investments, including target date funds and annuitizations, are optimized, there would still be significant variations in performance depending on the sequence of market results. Are retirement savings too exposed to market risk? comes to similar conclusions about market risk.

- Insurers Will Need to Scrutinize Individual Annuities as concerns with insurer pricing and capital, particularly with guarantees on variable annuities, were raised. The media and even brokers also questioned insurers and variable annuity pricing. Annuities were considered the ultimate safe investment - until insurers started wobbling. Can you still count on one? Brokers Fear Annuities May Not Honor Guarantees

- Advisors were also theorizing about adapting new assumptions and expectations in their planning. Advisors in the New Normal

As some time elapsed, assurances, explanations, and suggestions, have flowed, though doubt still prevails -

- Not Without Risk re-supported basic market theory.

- Implications of a Bear Market for Retirement Security studied past recessions and concluded that "if investors focus on areas that they can control - saving rates, spending, asset allocation, costs, and (limiting) market timing - they can measurably improve their long-term prospects" (albeit the past is no guarantee for future results).

- What We Learned from the Market Collapse suggests not that much judging by the answers of some top minds in the financial services industry.

- Managing Risks In A Market Meltdown provides interesting conceptual offerings of distinguished higher education

© 2011 Society of Actuaries, All Rights Reserved

financial thought leaders, but also not that much stemming specifically from this financial downturn.

- 5 New Investing Rules for Retirement suggests that people separate their investments into different pots; not to reach too far for yield; make it a muni; go for dividends; and consider Alternatives:

- How the housing crash hurts your retirement suggests that people learn from the turmoil and not "go ga-ga over go-go investments"; "gains are no substitute for saving"; and "too much debt can compound a crisis".

- Make Money, Whatever Happens to the Economy suggests 5 scenarios to consider (for starters) - Jobless Recovery; V-Shaped Recovery; Hyperinflation; Deflationary Spiral; and Decoupling.

- Don't Give Up Yet suggests that people save more; cut off your grown kids; rebalance; be optimistic; and work longer.

- While there is some recovery of 401(k) loss positions and there is an up-tick in people looking to advisers for help, there is still a lot of doubt. Balances Recover

- "Seven out of 10 Americans lack confidence the federal government has taken safeguards to prevent another financial industry meltdown according to a new Associated Press poll. Even more -- 80 percent -- rate the condition of the economy as poor and a majority worry about their own ability to make ends meet." A year later, worries linger on economy

- "Probably the most positive thing about Dow 10000 this time around is that so many people don't trust it" Dow 10000: A Caution Sign for Investors

- And while some say Why It's Time to Retire the 401(k) based on under-saving to date and losses near retirement, Is There a 401(k) Fix? suggests automating the degree of

© 2011 Society of Actuaries, All Rights Reserved

enrollment, matching, investment allocation, advice, and annuitizations.

b. Financial results
The downturn has raised questions about risk, derivatives, and capital sufficiency of all financial institutions. AIG, variable product guarantee risks and hedging programs, very low interest rates, and ownership of mortgage backed securities have certainly directed questions at insurers, and led to the need for increased capital, reserves, variable annuity charges, downgrades, and less business. Insurers Will Need to Scrutinize Individual Annuities, The VA industry: An analysis of recent activities and Outlook For Life, Health Remains Negative: S&P.

Hedging programs, to the degree implemented, have mostly worked Hedging programs save insurers $40 billion during economic crisis but many issues persist. The Economic Crisis: How Has Hedging Changed?

Interestingly, Moody's found that "mutual insurers tend to be better capitalized, take fewer business and product risks, face less exposure to negative publicity, rely less on capital markets, and have a longer-term orientation than public companies." Moody's: Mutuals Outperform

Rating Agency - The CDS Market Is A Tough Grader and in The Year Of The Recession it is pointed out that downgrades and negative outlooks have increased dramatically, anticipating that corporate bond defaults might reach an estimated 10% for 2009 and 13% for 2010.

One further wonders about questions being raised in this environment by the introduction of dynamic reserving and requests for re-grading mortgage-backed securities NAIC Panels Vote To Re-Grade Mortgage Securities and exemption of insurance from federal consumer financial protection. Annuity Exemption in CFPA Clarified by Committee Action Certainly confidence in insurers is weak - How Much Confidence Do Americans Have in Financial Institutions?

© 2011 Society of Actuaries, All Rights Reserved

Confidence in Various Types of Institutions

	Very Confident	Somewhat Confident	Not too Confident	Not at all Confident
Banks				
Workers	21%	56%	14%	9%
Retirees	27	51	12	9
Insurance companies				
Workers	14	53	20	13
Retirees	11	56	20	12
The federal government				
Workers	11	48	21	18
Retirees	11	45	22	22
Investment companies				
Workers	3	34	34	26
Retirees	2	31	24	37

Source: Employee Benefit Research Institute and Mathew Greenwald & Associates, Inc., 2009 Retirement Confidence Survey.

And though this is confirmed in a survey which rated life insurers next to last among 10 industries, and only a third were satisfied by insurance company service and a quarter would recommend their carrier, of the things they liked about their insurers a third said trustworthiness and a quarter said "a skilled workforce aware of their needs". Accenture: Most Customers Unhappy With Carriers

As shown in the following 3 charts, annuity sales moved around a bit in tune with the market. They were off 11% overall in 2009, and another 17% in the 1st half of 2010. Non-qualified sales were off the most, with employer plans almost level.

- Fixed annuities, sporting relatively high and safe interest rates, were up sharply in the 1st quarter of 2009, but faded to a small percentage loss for the year. They are even further down in 2010, though at 2007 levels.

- Indexed annuities were up 9% and SPIA's dropped 10% in 2009, but the latter kept pace with their increased 2008 level. Both have returned to pre-downturn levels in the 1st half of 2010, each matching record highs in the 2nd quarter.
- VA's were off increasingly and by18% for 2009 even though the S&P 500 gained 23%. They have rallied by 8% in the 1st half of 2010, but over previously decreased sales.

© 2011 Society of Actuaries, All Rights Reserved

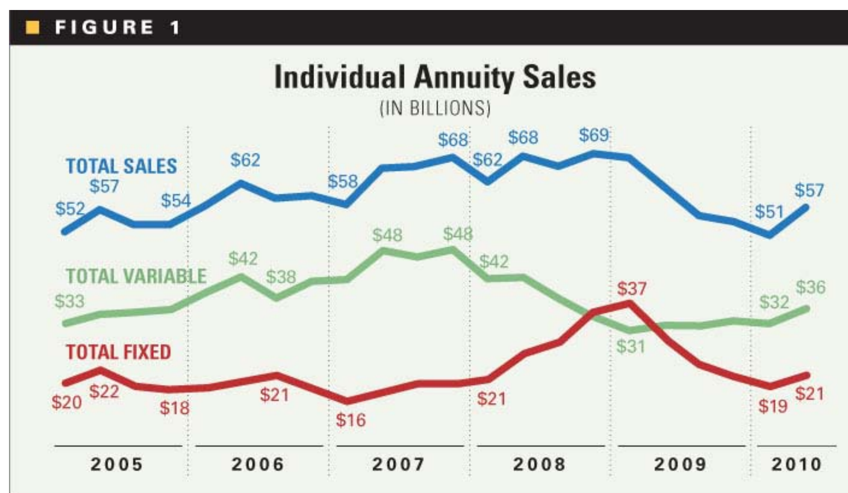
TABLE 1

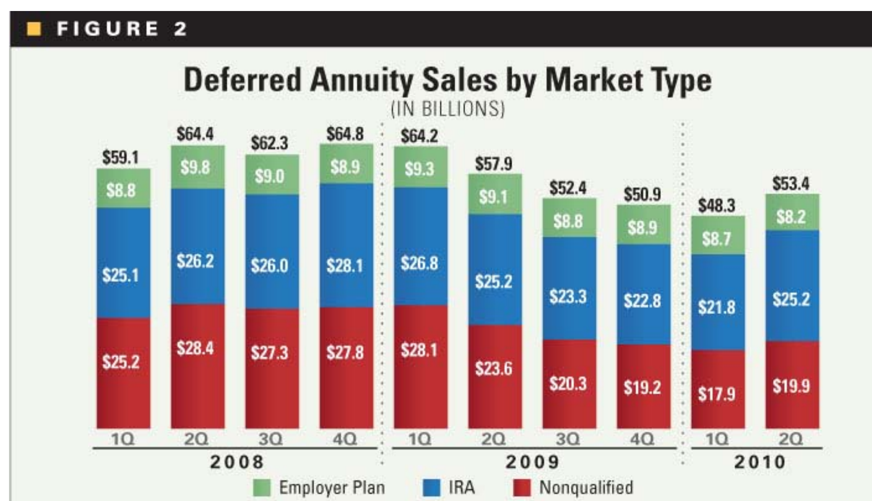
Individual Annuity Sales*

	Q1 '09	Q2 '09	Q3 '09	Q4 '09	2009	2009/2008 CHANGE	Q4 09/ Q3 09 CHANGE
Total Variable	**$30.8**	**$31.9**	**$31.7**	**$32.6**	**$127.0**	**-18%**	**3%**
Fixed							
Deferred Book Value	18.5	13.7	10.3	9.3	51.7	2%	-10%
Deferred Mva	6.9	3.4	2.3	1.5	14.1	-20%	-36%
Deferred Indexed	7.1	8.1	7.3	6.9	29.4	9%	-5%
Total Fixed Deferred	**32.4**	**25.2**	**19.9**	**17.7**	**95.2**	**0%**	**-11%**
Fixed Immediate	1.8	1.9	1.7	1.7	7.1	-10%	0%
Structured Settlements	1.5	1.4	1.3	1.3	5.6	-13%	-1%
Total Fixed	**35.7**	**28.5**	**23.0**	**20.7**	**107.9**	**-1%**	**-10%**
Total U.S. Annuities	$66.5	$60.4	$54.7	$53.3	$234.9	-11%	-2%

* Estimates in billions Source: U.S. Individual Annuities Survey, LIMRA, Windsor, Conn.

Annuity Sales Saw Big Changes In 2009





Are Annuity Sales Turning the Corner?

Life sales had the sharpest 6-month decline in 70 years with the financial downturn, recovering somewhat in the 1st half of

© 2011 Society of Actuaries, All Rights Reserved

2010. Decreases were mostly in the UL and variable sectors, the latter continuing its trend since 2000, with Whole Life doing relatively well. LIMRA: Individual Life Sales Stay Positive in Q2 Number of sales were only up at older ages (though volume was down), perhaps reflecting final expense and dependent income replacement coverage sales but decreased sales to the wealthy and perhaps curtailment of STOLI sales.

LTCI sales were also sharply off in 2009, seemingly because of higher premium rates and less "discretionary" spending in general. There was some recovery of this additional downturn in the first half of 2010, theorized to perhaps be connected to the passage of Patient Protection and Affordable Care Act (PPACA), but the long term weak sales picture of the decade persists. After a Near-Death Experience, Individual LTC Sales Rise Sharply

LIMRA Head Sees Opportunity in senior sales, but a decline in independent producers, insurer capital shortfalls, and at best tepid consumer confidence, suggest that the insurance industry still faces at least an upward battle in the short run.

c. Product changes – Insurance industry
First and foremost, the increase in volatility of equities has caused re-pricing and design of VA GLB's

Latest Trends in VA GLB – Late 2008 To 2009

- With effective date through mid May09, 33 VA writers filed changes on 125 existing products; 8 VA writers filed 12 new products.
- Summary of 2009 VA product changes:

A. Summary by nature of changes

Change Category	# of Products	# of Companies
Sales Discontinued or Restricted	42	18
Fee Increased	62	29
Product Features Scaled Back	44	19
Asset Allocation Changed/Restricted	16	10
Total	125	33

B. Summary by number of changes

# of Changes (from the above 4 categories)	# of Products	# of Companies
1	90	15
2	31	15
3	4	3
Total	125	33

9

May 18, 2009

Pricing Variable Annuity Guaranteed Living Benefits in an Extraordinary Time

© 2011 Society of Actuaries, All Rights Reserved

The downturn recognition of annuities and income guarantees may be opening the huge asset manager door to insurance offerings. Retirement Guarantees Could Stem Rollovers

Life insurance, annuities are still long-term decisions, and many are now looking at them and their guarantees more favorably. In fact MassMutual Analysis: Whole Life Insurance Can Help Supply Retirement Income, Preserve Equity Portfolios During Bear Markets extols the cash value of traditional life insurance for retirees.

GLWB's are selling so well that, even though the product has had to be watered down, Fidelity wants to sell it even though they can't fully handle its capital requirements Fidelity Outsources GWB Production to MetLife

A Summer Crop of Variable Annuities and Hancock Variable Annuity Simplified to Rival Funds follow this retrenchment of benefits and charges, though Nationwide Updates Menu and MetLife Teams With Wilshire suggests that not all are moving to simpler forms.

Asset Allocation Redefined suggests the incorporation of asset allocation into product and service offerings

d. Product changes beyond insurance

Target date funds have drawn some fire recently following the market downturn, and some are now debating how effective these funds are and what date should be targeted. Target Date Funds: Evaluating the Risks and Rewards

Inflation Cushion suggests that the fund companies are increasingly concerned about insurance company income guarantees, leading to New Product Pays Guaranteed Income On Managed Accounts showing the up-tick in interest in SALB's in light of the economic downturn and people's increased concern about outliving their assets.

Similarly, Prudential, Hewitt Partner on Guaranteed Income Option for 401(k)s.

© 2011 Society of Actuaries, All Rights Reserved

It is informally reported that reverse mortgage volumes have fallen significantly during the downturn, likely affected by the disrupted housing market.

e. Effects relative to distribution

Just trying to be there, reassure investors, and hold the line - a mid-2009 survey of experienced advisors name market volatility, 401(k) balances, and taxes as clients' main concerns, but a healthy attitude as well Clients Growing Tight With Advisors

Going with the flow - An independent B/D reported fixed annuity (!!!) sales way up. In February 2009, sales over $50,000 were:

- 46.6% Fixed Annuities
- 27.6 % Variable Annuities
- 9.2% Mutual Funds
- 16.5% Stocks or Advisory

74.2% were into products that offered guarantees!

"Fee-based advisors have identified five new Financial Landmarks to help investors navigate the changing economic landscape: accumulating more; leveraging the benefits of tax-deferral; considering more alternative asset classes and investment strategies; employing managed accounts for greater efficiencies; and the rapid growth of fee-based services." Fee-Based Advisors Say Current Economy Makes Savings Accumulation Through Tax Deferral More Important than Ever

Living benefit guarantees could open distribution doors, but changes, including lower commissions and fees, are suggested. VA Storm Opens Doors Likewise, product manufacturers aren't trusted, suggesting a need for re-branding financial services. Crisis Reveals Opportunity and Challenges: Identifying Leadership Qualities for Navigating Change

There is also anecdotal evidence that investment advisors are more open to annuitization for people hurt by the downturn.

Advisors More Confident About Economy and offer How to Build a Portfolio Wisely and Safely as ways of investing but

© 2011 Society of Actuaries, All Rights Reserved

hedging. However, advisors are still slow in moving to focus on income planning, and while 51% are recommending more conservative investments, only 31% plan to offer guarantees more, while 44% were apt to move towards recommending alternative investments Cerulli: Advisors Cool Toward Holistic Income Planning

Questions for financial advisors:

- "The financial planning community hasn't done enough self-examination regarding the recent crisis. Here are some lessons from the financial fiasco" - Mirror, Mirror On The Wall.

- "A look at whether Monte Carlo simulations help or hinder the planning process". What Are The Odds?

- "Philosopher and author Jacob Needleman says we need to rethink our attitudes about money and what really makes us happy" Integrity Lost

- "What the market upheaval has taught advisors" Lessons Learned

© 2011 Society of Actuaries, All Rights Reserved

IV. Implications and possibilities

The overriding implication of these market perceptions is the opportunity to serve the financial needs of the coming wave of baby-boomers. Those already retired are also a part of this post-retirement market opportunity, but they are less pivotal being fewer in number and relatively set financially, including pension income.

Success in serving these retirement needs, though, may require significant marketing, distribution, and product retooling. The insurance industry appears, even after what might be construed as some missteps, to still be favorably positioned for such retooling success. Moreover, success in this market could kindle break-throughs for insurers in other markets.

These implications and possibilities are explored in more detail in the remainder of this report.

A. Opportunity for post-retirement financial products & services

Clearly the wave of boomers approaching, reaching, and then living in retirement, possessing almost 1/2[1] of all current American wealth, is of itself worthy of market development consideration.

Coupled with the societal forces at play, accentuated by the recent financial turmoil and potential for belt tightening and inflation, boomers, even affluent ones, will need help analyzing, planning, managing, and coping with their emotional, social, and financial situations for retirement. They will also need help in finding effective financial instruments to optimize their resources and minimize their risks. The very life and risk nature of the evaluative services needed suggest that insurance financial instruments and sales approaches have the potential to do very well in this market.

Many of those already retired could also benefit from such help, though overall they have been less impacted by the downturn in terms of income and most feel reasonably okay about, and/or embedded in, their financial situations.

[1] Author calculation based on The Federal Reserve Board's Survey of Consumer Finances Table 4 as of the end of 2007 and U.S. Census Bureau Annual Estimates of the Resident Population by Sex and Five-Year Age Groups for the United States for July 1, 2008

© 2011 Society of Actuaries, All Rights Reserved

To an extent these retirement financial management needs will be satisfied by extensions of current offerings. However, there appears to be a significant opportunity for innovative solutions, albeit the effort required to develop and deliver such innovations might not be right for all providers.

Segmentation of the market seems in order, with needs and risk more significant market drivers than maximizing return and wealth transfer in many sectors.

B. Impediments to the market

Though the market need is clear, several major factors warrant attention:

1. Consumer issues

   The consumer perceptions suggest a number of issues that need to be addressed in serving this market:

   a. Pre-dispositions of boomers

      Boomers will likely resist cutting their standard of living because of insufficiencies in their savings, and instead work beyond "normal" retirement - if they can. The allure of the stock market, albeit dulled by the downturn, may also remain a factor in their approach to managing their retirement finances.

   b. Fear and apprehension in this risk and emotion-laden life stage

      Especially after the downturn, fear of health costs and running out of money, even among the affluent, who were hit hardest by the downturn, is more evident. Women, even those with resources, are especially concerned. This has made consumers more amenable to acquiring downside protection (such as are offered in Indexed and Guaranteed Living Benefits products) in seeking gains from equities. It may have also made them more amenable to purer protection as embodied in payout annuities and long-term care insurance, though market forces (e.g. low interest rates, sales approaches, fear of spending) may be tainting results to date.

   c. Reluctance to seek advice

© 2011 Society of Actuaries, All Rights Reserved

Only a small percentage of boomers indicate that they have or would seek financial advice, with just a modest increase in the throes of the downturn. The Internet, though, seems to be at least a source people are using to acquire information. Products and services beyond the basics, though, may still have to be sold.

d. Mistrust of insurers and their unfamiliar products
Though not that far behind the mistrust of most financial institutions, insurance product complexity and salesperson and commission driven product sales seem to add to distrust of insurers and their products.

e. Impact of the loss of home equity
The loss of home equity has had varying affects on this market:

- An overall dampening of consumer confidence and financial well being.
- For those expecting/needing to tap home equity for retirement income or LTC expenditures, or in leaving a legacy soon or before values return, these losses directly affect the living standards of those affected.

2. Distribution issues
Distribution issues are fundamental to pursuing this market.

a. Advice in retirement is a more analytical service
At the very least financial advice for someone in retirement requires a plan for generating the income needed to pay for living expenses. For those advisors that are primarily investment advisors, this may represent a significant departure from the way they do business.

b. Post-retirement planning may need to be more comprehensive
In most instances, at- or post-retirement financial planning needs to be holistically integrated with the many emotional and life-choice non-financial planning issues involved. Adding the Income Dimension Not only does this further complicate the planning process, it expands its scope, relational requirements, and the advisory time involved. Many advisors will not want to

© 2011 Society of Actuaries, All Rights Reserved

expand their services to accommodate these additional aspects. Moreover, if they do opt to provide these types of service, it would seem to call for a compensation change to at least a partial fee-for-service basis, and a move to the fiduciary standard being advocated by planners in general. Planners Fight Back On Fiduciary Standard

c. Retirement planning methodology is in flux
Beyond the questions raised in a) and b), the basic post-retirement "decumulation" financial planning process is in flux. Many approaches are being developed and tried along with various product offerings.

Moreover, the financial downturn has raised new questions about "tried and true" investment philosophies such as: equity/bond and alternative investment asset class balancing; volatility assumptions; buy and hold; stability of value stocks and home equity; credit parameters; the use of derivatives; etc., though aversion of most investment advisors to life annuities and long-term care insurance may have abated a bit.

Some would say that because of the risks involved and the limitations on recovery through earnings or over time, planning and managing money in retirement should model mortality, morbidity, inflation, and withdrawal, as well as investment risks, including their volatility and what-if impacts of other post-retirement risks.

But the majority of advisors have been schooled in an accumulation mold, have trouble dealing with just the investment risk in a dynamic modality, and have not been well schooled in other risk elements and related financial instruments. The general public has trouble with even the basics, and attempts at education through Internet and brochure explanations from many sales-oriented sources can be confusing at best and too often misleading Marketing to baby boomers: Embracing demographic change

The question is, given people and advisor weaknesses, the broad role advisors active in post-retirement financial

© 2011 Society of Actuaries, All Rights Reserved

management have played, and the cost of development and training, what is practicable? Perhaps new rules-of-thumb would help, albeit such rules tend to be simplistic. Perhaps the recovery will be strong psychologically as well as financially. Or perhaps we can just rely on people and government's ability to adjust over time.

At the very least the fundamentals will need to be examined, and a premium placed on training advisors in basic handholding areas such as the income vs. legacy tradeoff; looking at failure scenarios; objective debunking of unwarranted fear; and providing comprehensible base plans.

C. Societal implications

The societal trends suggest some possible changes.

1. Redefining "retirement"

At a micro level, pre-retirees are skeptical about retirement; older boomers even have doubts about Social Security and when they might be able to retire. This could be a positive, though, if it motivates seeking advice and being more prudent in their financial behavior.

On a macro level, the "dream" of retiring at 65 or earlier seems to need revisiting. People are living longer and healthier. Funding retirement is becoming too costly both on a personal and societal level. Moreover, work is becoming less physical; if meaningful, part-time and/or less on-demand work in "retirement" can be rewarding. Yet many react with horror to the thought of having to work to a later retirement age. Quite often this is a function of being burned out in a particular job/occupation, or just a disappointment of the failed expectation of "timely" retirement.
Working Longer: The Solution to the Retirement Income Challenge

The evolution to defined contribution plans has resulted in more people coming up short in funding "normal retirement", but DC portability has allowed people to more easily switch jobs. If the concept of career and retirement was further re-socialized along these lines, multiple careers, with educational and even recreational respites along the way (as some are already doing),

could elongate the period to retirement and shorten the period after retirement. Funding retirement would thus require less saving (and less stress to do so) each year. It would also help maintain a better worker to non-worker (retired) ratio for society as a whole. There will of course be health and other reasons why this won't work for everyone, but awareness and preparedness for this possibility would help. Providing Income for a Lifetime: Bridging the Gap between Academic Research and Practical Advice Older Workers on the Move: Recareering in Later Life

2. Access to home equity
   Home equity is the predominant asset of most pre- and post retirees. Yet most people and financial planning approaches and software do not incorporate and make plans for utilizing home equity, nor do they plan for evolution away from one's house, including migration to various evolving forms of care and multi-housing facilities.

   People are in need of more information about "norms" for these shelter and care questions and the various funding mechanisms that might be used to make utilization of home equity more effective, such as Advising Investment Clients About Mortgage Debt and Home Equity and At-Need Annuities–A Dynamic Long-Term Care Funding Duo. Otherwise, retirees might increasingly become targets for scams, poor advice, and/or pre-mature drains. Tapping Home Equity in Retirement

3. Chronic care will happen even later in life
   Chronic care will likely remain predominantly an end-of-life condition regardless of when people retire and how long they live. Onset might be at a later age and be for a shorter duration, though, with improved longevity. Partitioning some of chronic care risk management into a separate stage of retirement planning might thus be worth exploring.

4. Leaving a legacy implications
   With longevity, the feeling of needing to leave a legacy to one's already older offspring and even grandchildren may be fading. This has positive implications for the sale of life only payout

© 2011 Society of Actuaries, All Rights Reserved

annuities but may compromise one of the motivations for retirees to buy life insurance.

5. The need for centralized financial education
Financial illiteracy is widespread. It is especially a problem in respect to post-retirement financial matters where the consequences of poor risk management can be dire. The complexities of insurances are not helpful.

   The Internet can be helpful, but there are so many sources of information, many slanted, jargoned, or just skimming the surface, that it is hard for most to get a sound base they can trust and build on. The government is beginning to try to help, e.g. forecasts of Social Security payments in their yearly statements; the Lifetime Income Disclosure Act and DOL/Treasury RFI attempts to do the same for DC plan accumulations; FINRA and Department of Labor first round retirement financial planning calculators; and grants to educational institutions for research to better educate people about retirement financial matters.

   A central unbiased and vetted not-for-profit or government website devoted to the education of consumers about financial matters, backed by top-notch "face-to-face" call center planners (perhaps even incorporating Personal Actuaries), well beyond MyMoney.gov is needed. Such a service would include interactive financial planning modules that would educate rather than give the simplistic and not understood answers calculators now offer. It would also provide perspective on the workings and costs of various financial instruments and the stability of the financial institutions behind them. Response 685(last paragraph) to Request for Information Regarding Lifetime Income Options for Participants and Beneficiaries in Retirement Plans

D. **Implications for distribution**

Though the sales focus of many companies has migrated over the last two or three decades to an investment (accumulation) mode, a significant part of career and independent shops are still involved in life cycle based needs analysis and protection sales. Moreover, these sales forces are themselves aging. Such a sales force is a potentially valuable base for the post-retirement market where client/advisor

© 2011 Society of Actuaries, All Rights Reserved

identification, risk aversion, and protection are being demonstrated to be basic.

Banks have been increasingly selling insurance products, primarily annuities, to boomers and seniors, and the registered representatives and investment advisor representatives of independent broker-dealers have been selling variable annuities, particularly those with guaranteed living benefits, and even some immediate annuities. With the downturn, RIA's are also increasing recommending guaranteed income. More Advisors Using Guaranteed Income Streams These distributors are natural targets for further use of insurance products in the post-retirement market.

Even beyond these distributors already using insurance products, the use of insurance products to hedge risks in the post retirement market creates an opportunity for the use of insurance products in the broader investment markets they serve. Some insurers have been moving in this direction by shaping variable annuities to look and feel even more like tax-deferred alternative investments for RIA's.

Given the planning and handholding nature of the post-retirement market and oversight of it, and the increasing emphasis on fee-based and fiduciary approaches, a fee-for-service model may need to be evolved. Alternatively, rather than duck commission disclosure, better explanations of its motivation and equivalence to other forms of compensation for the services performed need to be put forth to dispel prejudices about commissions. The Next Generation also makes the case for a higher integrity level and a move towards fiduciary standards.

The degree that an elaborate planning mode, a buckets approach, an extension of a products investment focus, or yet another approach is used by distributors to attract and help retirees, and the insurance products they might use, will depend in part on the nature of a company's existing distribution, its overall target marketing, and its aspirations in this market. This would also be the case for banks, broker dealers, and other distributors, though insurers have less control of the approaches they use. The Great Protector suggests that wealthy clients also want to preserve "lifestyle" by choosing investments that produce an income that is safe, predictable, or

© 2011 Society of Actuaries, All Rights Reserved

guaranteed to give them leeway to invest in more aggressive positions.

E. Web-based initiatives

Changing Channels: Insurance Company Sales Models summarizes the broad considerations about going beyond traditional distribution.

The Internet is obviously an intriguing tool that could potentially reach people with effective and controlled advice, as well as products at a reduced cost of distribution. Some online sales of bank, mutual fund, and even insurance products, e.g. auto, home, term life, and supplemental health have been successful. Direct online selling of products such as permanent life insurance, long-term care insurance, and most annuities have not taken hold, as product and selling complexity, as well as commitment to existing channels, has forestalled major attempts, at least to date. Converting and Capturing The Senior Market

Social Networking offers potential for a different form of persuasion that might offer possibilities. The risk-laden, protected, and complexities of post-retirement might not appear to be a place to start, but retirees network about serious matters and trust peer advice, though attempts by AARP and boomer sites like Eons.com have not proved successful – yet. Social Networking might also provide a forum for branding and learning first hand what consumers are thinking.

A specially groomed offering might be an interesting place to start. For Your Business: Thinking Strategically for 2009 and Beyond This might include possibilities such as:

a. A "Word-of-mouth" communications network
b. A state of the art personal financial planning package
c. A mold your coverage to your financial plan program
d. A simple transparent income floor product

F. Seeking and supporting governmental programs

The following governmental initiatives seem to warrant support.

1. Encouragement of annuitizations

© 2011 Society of Actuaries, All Rights Reserved

- The **Lifetime Income Disclosure Act** to require 401(k) sponsors to inform participants of monthly income that might be projected from current balances.

- The Departments of Labor and Treasury Request for Information Regarding Lifetime Income Options for Participants and Beneficiaries in Retirement Plans which suggests support for going even further in encouraging annuitization and projection of the retirement income potential of DC accumulations. Lobbying for deferred annuity accumulation and annuitization within 401(k)'s, though, would seem to compromise the practicable objective of promoting annuitization.

- As in the U.K, a portion of qualified assets might be mandated to be annuitized on a laddered basis, perhaps on a trial basis, with due regard to impairments of any significance, as suggested in Increasing Annuitization of 401(k) Plans with Automatic Trial Income

- Moreover, if annuitizations from private companies were further encouraged, perhaps guarantees of some elements (minimum amounts, interest, mortality) or overall (analogous to FDIC guarantees of bank deposits) might also be worth considering to remove consumer apprehension in this regard. What Does It Cost To Guarantee Returns?

2. Tax incentives
   Additional tax incentives for annuitizations, e.g. H.R. 2748. ASR Applauds the Introduction of Comprehensive Retirement Security Legislation in the U.S. House.

3. Education
   As suggested above, encourage the SSA, DOL, or other governmental agencies to encourage additional programs (direct, or through endorsement or support Boston College Launches New Center for Financial Literacy) to help people better understand basic retirement financial planning.

4. Long-term care

© 2011 Society of Actuaries, All Rights Reserved

The nature of the governmental assistance for insuring long-term care costs could be improved by revamping "Partnership" Long-term Care Insurance plans. Rather than "partnering" to allow qualification for the more restrictive care of Medicaid, encourage government partnership first dollar cost sharing (co-paying) under Medicare to make it easier for middle as well as upper income people to afford long term care.

An improved CLASS Act base coverage approach might also be helpful in the long run. CBO letter on CLASS Act Actuarial Issues and Policy Implications of a Federal Long-Term Care Insurance Program Long-Term Care in Health Care Reform: Policy Options to Improve Both Developing a Better Long-Term Care Policy: A Vision and Strategy for America's Future

G. Product enhancements

An overriding implication of the perceptions of insurance products is that there is a need to explain them better, suggesting product simplification and/or clearer descriptions, disclosures, and terminology. Together with the perception that insurance products are expensive, clarifications will, in turn, put more pressure on lower cost and competitiveness, not only between insurers, but also vs. non-insurance company financial products.

The Internet and social networking further implies a need to address clarity and cost.

Moreover, the impact of increased patenting suggests that innovation will also be a factor in this frontier market.

Specific product enhancement suggestions include.

1. Revisit and revitalize "annuitization"
   Life contingent annuities are still felt to be a key component to efficient & effective post-retirement financial management. Moreover, there has been some recent sales sparks and advisor interest, some stemming from the boomers starting to retire, some from the downturn, some from growing concerns about outliving assets with increased longevity and less pensions, some from new planning approaches, and some from product, marketing, and promotion innovation. The Lifetime Income Disclosure Act and

© 2011 Society of Actuaries, All Rights Reserved

the Departments of Labor and Treasury RFI also loom as potential market makers. Given the impending retirement shortfall of so many boomers, it is almost imperative that this product be better utilized, as it is core for reducing shortfalls for many. LIMRA (thus) Analyzes Immediate Annuity Buyers to be a potential market of $250 billion dollars a year.

a. Terminology

The term "annuitization" carries negative locked-in and a big bet feel to it. Pensionization has been tried as a substitute, but seemingly hasn't worked sufficiently; "Incomization" – turning assets into income – might be a new possibility that would seem consistent with the Framing and Annuities study.

The term Annuities in the Post-Trust Era has also lost clarity and is disliked. It is often used for deferred annuities; in other cases immediate annuities are meant. And often each suffers from innuendoes about the other. Moreover, "longevity insurance", GLWB's in deferred annuities, and other new hybrid designs have further confused annuity terminology. This was particularly apparent in the testimony at the DOL/Treasury Lifetime Income hearings. Perhaps "accumulation" and "payout" stages of an annuity contract, or some other more defining terminology, would be more understandable.

b. Reframing the power of life contingent annuities

The survivorship leverage of life contingent annuitization is not understood and appreciated even within the insurance industry, and is rarely clearly communicated to consumers.

On its face, annuitization seems quite simple – make a purchase payment and get $X per month for as long as the annuitant lives. But such a "simple" transaction is quite scary because of the potential loss of the purchase payment on "early" death. As pointed out in the behavioral research, this makes people wary of "losing" a substantial "investment" to an insurance company should they die too soon after annuitizing. Anticipated "buyer's remorse" sets in and they don't buy.

© 2011 Society of Actuaries, All Rights Reserved

Reframing by showing how a life annuity works– including its survivorship pooling element which enhances income that can be drawn, would make it clear how a life contingent annuity optimizes income for life from assets. Showing how it works can be done by unbundling the annuity's elements (analogous to a Universal Life like bank account depiction of Whole Life insurance) along the lines of the following illustration:

Age	Begin Acct Value	Interest	Living Credits	Income Payout	End of Year Acct Value
70	$100,000	$5,000	$1,814	$9,925	$96,888
71	$96,888	$4,844	$1,959	$9,925	$93,766
80	$68,945	$3,447	$3,494	$9,925	$65,960
90	$42,150	$2,107	$5,594	$9,925	$39,925
100	$22,670	$1,134	$6,943	$9,925	$20,821
110	$5,649	$282	$8,328	$9,925	$4,334
114	$994	$50	$9,354	$9,925	$473
115	$473	$24	$9,429	$9,925	$0

The illustration is of a life only payout annuity to a male age 70, assuming for simplicity that the pricing is based on 5% interest and the 2000 Annuity Mortality Table, and results in a payout rate of $9,925 payable annually for a $100,000 purchase payment

This depiction, showing the "extra" Living Credit monies contributing to an almost 10% payout rate, might appear to complicate the product's workings. But on the contrary, this depiction will entice buyers by showing that an annuity is a savings vehicle with a kicker element that trades remaining principal upon death to leverage income to benefit all who buy it by generating more income than can safely be drawn from assets using any other instrument or approach. As such, it will ameliorate the emotional concerns about buying it; feature its leveraging qualities; and transform the buyer's remorse fear into a desire for the leveraging.

Such transparency would also help define other aspects of annuities - deferred, immediate, variable, indexed, guaranteed living benefits, etc. Moreover, by enabling more understanding, it would also facilitate the evolution of innovations for starting and stopping payment; investment optionality and control;

© 2011 Society of Actuaries, All Rights Reserved

longevity type features; access; death benefits; Cost of Living Adjustments (COLA); impairments; and beyond.

Such features will also overcome advisor reluctance to utilize life annuities because of loss of management control of funds placed in such products.

c. Lower M&E charges
The survivorship and more locked-in nature of payout annuities, together with transparency understanding, should afford lower, or even the elimination of, M&E charges that are so deleterious to variable annuities and to fixed annuities by extension.

d. Decumulation strategies/packages
The unique nature of life annuities for retirement financing makes them ripe for the creation of more complete decumulation strategies and packages for the affluent as well as those in need of leveraging securely.

e. More effective lifetime COLA payout annuity
A variable chassis with COLA adjusted payouts could, depending on practicable design features, be more effective than the hit taken when a SPIA is backed by Treasury Inflation-Protected Securities (TIPS).

f. Underwritten liquidity
A few products provide elements for variously underwritten access to life contingent annuities. Combining their best elements could provide even more consumer-friendly access.

g. Reversionary annuities
Expanded use of these life insurance products could make spousal single life annuities more attractive in pension maximization type funding.

2. Accumulation-phase annuities
The tax deferral feature of deferred annuities is more marginal in non-qualified contracts for life expectancy shortened retirees, and in qualified plans its redundancy has always been a point of

© 2011 Society of Actuaries, All Rights Reserved

contention by regulators, certain advisors, and consumer advocates. The potential tax benefits of combined annuities under PPA offers a new tax selling point. Other possibilities for keeping accumulation phase annuities viable for the post-retirement market are:

a. Living benefit guarantee riders
   The sales success of these riders demonstrates how much people are concerned with outliving their assets and enamored by the stock market. It also demonstrates financial advisors' preference for investment-oriented products; even complex ones with varying bells and whistles from company to company.

   However, the market appeal of these riders, particularly for retirees, may wane with their re-pricing, demonstrated lock-in and limited benefits made more apparent by the financial turmoil, particularly under fiduciary standards. There is evidence that many advisors have been discerning these weaknesses. Their introduction into mutual funds through SALB's also compromises their potency as propriety annuity enhancements.

   Less product "sizzle" and more education and modulation of both consumers and advisors may be needed for continued use of these riders in this market.

b. Deferred variable annuity cost structure
   The current cost structure is too transparently high for financial planners and RIA's, let alone consumers.

   Reducing M&E charges, commissions, and management fees as a few companies have recently done, all the way to eliminating M&E charges, appears to be key to expansion into the broader as well as post-retirement markets.

   Such changes would also reduce or eliminate surrender charges that are negatively perceived. Proactive explanation of the reasons for and benefits of surrender charges would be helpful in any case.

© 2011 Society of Actuaries, All Rights Reserved

c. Combined annuities

The potential tax benefits of combined annuities under PPA offers a new tax selling point, albeit product introduction and sales to date have been tepid, perhaps compromised by the downturn.

d. Indexed annuities

Prospects for indexed annuities for the post-retirement market are similar to those for the GLB riders. A move to longer crediting periods and less manipulative structures is suggested in any case.

e. Retirement housing oriented variable annuity

An annuity funding even more flexible continuing care retirement community options might be an interesting new product.

3. Make LTCI more consumer friendly

Funding long-term care costs is a difficult challenge on both a personal and societal level. Some suggestions for funding innovations follow.

a. Home health care (HHC) focus

Nursing home coverage is a turn-off for many people. While HHC only insurance may need to be priced not that much lower than comprehensive coverage, psychologically HHC (including Assisted Living) products seem ripe for a return try at almost any price. The lack of nursing home coverage in an HHC product can be downplayed because at-need leverage is now available through long-term care impaired annuities that can help self-funding of the nursing home **if** (a consumer desirable "if") such care is ultimately needed.

b. Chronically impaired annuities

Similarly, variations on the at-need annuity alternative funding mechanism have much potential, especially coupled with home care focused LTCI as discussed immediately above and to help stretch constricted home values to pay for nursing home costs.
Home Equity and At-Need Annuities–A Dynamic Long-Term Care Funding Duo

© 2011 Society of Actuaries, All Rights Reserved

c. Tiered funding of long-term care costs
An extension of the above is that rather than trying to make the purchase of LTCI an all-encompassing solution, LTCI might be positioned to be only a part of paying for long-term care. Others might include private pay-as-you-go from liquid assets, dipping into home equity, and/or at-need annuities Housing in Retirement Monograph).

This further suggests integrating long-term care cost needs into comprehensive post-retirement financial planning.

d. Combination products
The tax benefits of PPA for annuity/long-term care insurance combination products seem to offer potential, though dual expertise and the financial downturn seem to have to date dampened such potential.

Simplification and transparency as to the layers involved would seem important for advisors as well as consumers.

e. Standardized "frills"
Long-term care and the various insurance plans available are complicated enough. Many of the product option "frills" being offered have utility value, but they further complicate the essential product. Standardized frills analogous to Medicare Supplements would help consumer focus and advisor handling fears.

4. Life insurance
To the degree the post-retirement market involves a return to a more robust financial planning approach, the store of value, guarantees, flexibility and tax advantages of life insurance would appear to have potential for even more use in all elements of retirement finances, including health, long term care, liquidity, transfer, protection, and income. Product Trends in Life Insurance Innovating on the income element has recently been seen in Insurer Targets Mass Affluent.

© 2011 Society of Actuaries, All Rights Reserved

Even more far-reaching, some companies are trying to attract RIA's by incorporating life insurance as an asset class into a fully robust financial planning model. NY Life Woos RIA's

Further, one company has been considering using the values in a life policy as an alternative to longevity insurance – if needed.

With people living 20, 30, and even 40 or more years after 65, inherent feelings to pass on a legacy to provide for heirs' income needs, and the proprietary nature of life insurance, life insurance innovations could be a major player in this market.

5. Health insurance
   Medicare related health insurance seem to offer door opener, referral or sales opportunities for distributors, as wholesalers have been promoting with boomers retiring. However, though a significant line of business, health insurance doesn't need to over-lap other retirement products at the manufacturer level. 5 Facts About The Senior Health Insurance Market You Can't Afford to Ignore

6. Utilizing mutual funds, ETF's, and other non-insurance products
   The weak persona of deferred annuities for the post-retirement market suggests consideration of marketing and/or manufacturing other investments if competitive advantages can be established. However, this initiative would likely need to make sense from a broad market perspective before being considered for the post-retirement market.

   In these respects, the following is offered:

   a. Other-than-insurance investments
      Many selling insurance products are also selling the products of other financial institutions. Some insurance holding companies are or have also entered such businesses. If so they might be effectively incorporated into the post-retirement market initiative. For example, the stepped-up death benefit of mutual funds is appealing for certain aspects of post-retirement financial management. Banking is also clearly much utilized by retirees.

© 2011 Society of Actuaries, All Rights Reserved

b. Standalone living benefits (SALB's)
   Are insurers "giving away the store" by helping mutual funds offer these options (or are they really not that right for the shorter-term nature of mutual funds)? If so, insurers might want to reclaim the value of lifetime guarantees by pushing life annuities.

c. Reverse mortgages
   These instruments have many synergistic insurance, investment, and post-retirement need elements to which insurance companies might consider bringing their expertise.

V. Conclusion

Retirement is an American Dream, but it is also laden with many concerns, not the least of which are the financial matters for which most up and coming retirees are under-funded, under-educated, and under-advised. Societal changes, including the recent financial downturn, are making the financial aspects of retirement even more difficult as the baby boomer generation begins to enter to the retirement stage of life.

The upshot is an opportunity for financial services companies, increasingly supported by federal government agencies, to offer products and services to meet the post-retirement needs of this growing market. Insurers are especially well positioned to take advantage of this market opportunity because they:

a) Offer proprietary products that directly address the post retirement financial risks, and

b) Control distribution that has had a planning component to its approach to sales.

Success may also provide insurers with expanded access to distribution in other markets.

But significant distribution, marketing, public education, and product retooling will be needed for those insurers that choose to pursue this market, broadly -

© 2011 Society of Actuaries, All Rights Reserved

- o Distribution retooling will need to involve more extensive and holistic planning and fee-based compensation modes, as well as utilization of the Internet.

- o Marketing will entail development and training in still evolving post-retirement planning and selling methodologies.

- o Product will involve reframing and energizing life-contingent annuities, long-term care insurance, and life insurance, as well as potential shifts away from deferred annuities.

© 2011 Society of Actuaries, All Rights Reserved

VI. **Bibliography**

References listed below are in the alphabetical order of the hyperlink titles as they appear in the paper. Web site links are as of September 2010; if "broken", the bibliographic specifications should provide sufficient information to search for other links.

2008 Retirement Confidence Survey - How Much Have Workers Saved for Retirement?
Employee Benefit Research Institute, *How Much Have Workers Saved for Retirement?*, Fast Facts, April 17, 2008

2008 Society of Actuaries Annual Meeting, Retirement-New Products & Approaches
Brent Hamann, Marcia Mantell and Christopher G. Raham, *Retirement—New Products and Approaches*, SOA 2008 Annual Meeting & Exhibit, October 20, 2008

2008: The Historical Impact and Future Implications of Extraordinary Markets
Francis M. Kinniry Jr., Donald G. Bennyhoff, and Christopher B. Philips, 2008: The Historical Impact and Future Implications of Extraordinary Markets, Vanguard Investment Counseling and Research, 2009

2009 Survey of Owners of Non-Qualified Annuity Contracts
The Gallup Organization and Mathew Greenwald & Associates, 2009 Survey of Owners of Non-Qualified Annuity Contracts, The Committee of Annuity Insurers, 2009

401(k) Balances and Changes Due to Market Volatility – 1/1/08 to 12/31/09
Employee Benefit Research Institute, *Change In Average Account Balances (by Age and Tenure) From January 1, 2008 – December 31, 2009 Among 401(k) Participants with Account Balances as of Dec. 31, 2007*, EBRI, December, 2009

401(k) Balances and Changes Due to Market Volatility – 1/1/08 to 3/17/31/09
Employee Benefit Research Institute, *Change In Average Account Balances From January 1, 2008 – March 17, 2009 Among 401(k)*

© 2011 Society of Actuaries, All Rights Reserved

Participants with Account Balances as of Dec. 31, 2007, EBRI, March, 2009

5 Facts About The Senior Health Insurance Market You Can't Afford to Ignore
Rey Villar and Sarah Grimmer, *5 Facts About The Senior Health Insurance Market You Can't Afford to Ignore – And How You Can Establish Your Leadership Position In This Incredible Market,* ProspectZone

5 New Investing Rules for Retirement
Katy Marquardt, 5 New Investing Rules for Retirement, US News and World Report, January 8, 2009

55+ Housing: Builders, Buyers, and Beyond
National Association of Home Builders, 55+ Housing: Builders, Buyers, and Beyond, MetLife Mature Market Institute, September 2009

A big step up
Ron Panko, *Viatical and Life Association of America Conference*, Best's Review, February 1, 2006

A Smarter Form of SWiP
Kerry Pechter, A Smarter Form of SWiP, Retirement Income Journal, June 16, 2009

A Strategic Analysis of the U.S. Life Insurance Industry
Narayan Shankar, A Strategic Analysis of the U.S. Life Insurance Industry, The Actuary Magazine, Society of Actuaries, August 2005

A Summer Crop of Variable Annuities
Kerry Pechter, *A Summer Crop of Variable Annuities*, *Retirement Income Journal*, July 29, 2009

A year later, worries linger on economy
Jim Kuhnhenn, A year later, worries linger on economy, Associated Press, September 14, 2009

AARP
AARP.org

© 2011 Society of Actuaries, All Rights Reserved

AARP 30 days of frenzy in the financial sector
S. Kathi Brown, *AARP The Magazine Survey of Investors Aged 50+: Reaction to 30 days of Frenzy in the Financial Sector and Stock Market,* AARP, November 2008

Accenture: Most Customers Unhappy With Carriers
Warren S. Hersch, Accenture: Most Customers Unhappy With Carriers, National Underwriter Life and Health, December 3, 2009

Accumulations in Retirement Accounts, 2005 to 2009
Barbara A. Butrica and Philip Issa, Accumulations in Retirement Accounts, 2005 to 2009 , Urban Institute, Fact Sheet on Retirement Policy, July 2010

ACLI Life Insurers Fact Book 2009 – Table 3.6
ACLI, *ACLI Life Insurers Fact Book 2009*

Actuarial Issues and Policy Implications of a Federal Long-Term Care Insurance Program
P.J. Eric Stallard and Steven Schoonveld, *Actuarial Issues and Policy Implications of a Federal Long-Term Care Insurance Program*, American Academy of Actuaries, July 22, 2009

Adding the Income Dimension
Peng Chen and James X. Xiong, *Adding the Income Dimension*, Morningstar Advisor, Spring 2008

Advising Investment Clients About Mortgage Debt
Joseph A. Tomlinson, *Advising Investment Clients About Mortgage Debt*, Journal of Financial Planning, June 2002

Advisors in the New Normal
Francis M. Kinniry Jr., Donald G. Bennyhoff, and Christopher B. Philips, *2008: The Historical Impact and Future Implications of Extraordinary Markets,* Vanguard Investment Counseling & Research, Vanguard, 2009

Advisors More Confident About Economy
Advisors More Confident About Economy, Financial Advisor, September 15, 2009

© 2011 Society of Actuaries, All Rights Reserved

[After a Near-Death Experience, Individual LTC Sales Rise Sharply]
Trevor Thomas, NU Online News Service , *Are Annuity Sales Turning the Corner?,* National Underwriter Life and Health, September 13, 2010

[An Update on Current Patent Activity]
Insurance IP Bulletin, Tom Bakos Consulting Inc. and Markets, Patents, Alliances, LLC

[Analyzing the Pros and Cons of Retirement Income Strategies]
Noelle E. Fox and Drew A. Denning, Analyzing the Pros and Cons of Retirement Income Strategies, Insured Retirement Institute, October 7, 2009

[Annuities in the Post-Trust Era]
Allison Bell, *Annuities in the Post-Trust Era,* National Underwriter Life and Health, December 21, 2010

[Annuities were considered the ultimate safe investment - until insurers started wobbling. Can you still count on one?]
Walter Updegrave, Annuities were considered the ultimate safe investment - until insurers started wobbling. Can you still count on one?, CNN Money, Money Magazine, January 26, 2009

[Annuitization: Keeping Your Options Open]
Irena Dushi and Anthony Webb, Annuitization: Keeping Your Options Open, Center for Retirement Research at Boston College, March 2004

[Annuitized Wealth and Consumption at Older Ages]
Barbara A. Butrica and Gordon B.T. Mermin, Annuitized Wealth and Consumption at Older Ages, Center for Retirement Research at Boston College, December 2006

[Annuity Exemption in CFPA Clarified by Committee Action]
Danielle Holland, IRI: Annuity Exemption in CFPA Clarified by Committee Action, Insured Retirement Institute, October 21, 2009

[Annuity Sales Saw Big Changes In 2009]

Joseph Montminy and Jafor Iqbal, NU Online News Service , *Are Annuity Sales Turning the Corner?,* National Underwriter Life and Health, September 13, 2010

Annuity Suitability Questionnaire
MyFloridaCFO.com, Annuity Suitability Questionnaire, December 25, 2009

Annuity/Long-Term Care Insurance combination Products
Carl Friedrich and Sue Saip, Annuity/Long-Term Care Insurance combination Products, Milliman, July 2009

Are Annuity Sales Turning the Corner?
Joseph Montminy and Jafor Iqbal, NU Online News Service , *After a Near-Death Experience, Individual LTC Sales Rise Sharply,* National Underwriter Life and Health, September 13, 2010

Are retirement savings too exposed to market risk?
Alicia H. Munnell and Dan Muldoon, Are retirement savings too exposed to market risk?, Center for Retirement Research at Boston College, Issue in Brief, no. 8-16, October 2008

Are You Sure You're Saving Enough for Retirement?
Jonathan Skinner, *Are You Sure You're Saving Enough for Retirement?*, Journal of Economic Perspectives, vol. 21, no. 3, Summer 2007

ASR Applauds the Introduction of Comprehensive Retirement Security Legislation in the U.S. House
PRNewswire, ASR Applauds the Introduction of Comprehensive Retirement Security Legislation in the U.S. House, www.prnewswire.com

Asset Allocation Redefined
NU Online News Service, *Asset Allocation Redefined*, National Underwriter Life and Health, May 4, 2009

Average Worker Contribution Rates to 401(k)-Type Plans
Employee Benefit Research Institute, Average Worker Contribution Rates to 401(k)-Type Plans, Fast Facts #117, March 19, 2009

© 2011 Society of Actuaries, All Rights Reserved

Baby Boomer Retirement Security: the Roles of Planning, Financial Literacy, and Housing Wealth
Annamaria Lusardi and Olivia S. Mitchell, Baby Boomer Retirement Security: the Roles of Planning, Financial Literacy, and Housing Wealth, National Bureau of Economic Research, October 2006

Balances Recover
NU Online News Service, Balances Recover, National Underwriter Life and Health, September 15, 2009

Bank Will Allow Customers to Deposit Checks by iPhone
Susan Stellin, Bank Will Allow Customers to Deposit Checks by iPhone, New York Times, August 9, 2009

Barriers to Financial Advice
Dan Iannicola, Jr. and Dr. Jonas Parker, *Barriers to Financial Advice for Non–Affluent Consumers*, Society of Actuaries, September, 2010

Beating the bear with annuities: Are you leaving money on the table?
ProducersWeb.com, Beating the bear with annuities: Are you leaving money on the table?, April 27, 2009

Behavioral Obstacles to the Annuity Market
Wei-Yin Hu and Jason S. Scott, Behavioral Obstacles to the Annuity Market, Pension Research Council, Wharton School of Business, University of Pennsylvania, 2007

Best Practices for Retirement Planning
Lewis Schiff, Best Practices for Retirement Planning, Investment Advisor, June 1, 2009

Boston College Launches New Center for Financial Literacy
Andrew Eschtruth, *Announcement of the creation of the Financial Literacy Center*, Center for Financial Literacy at Boston College, September 29, 2009

Brokers Fear Annuities May Not Honor Guarantees
Money Management Executive, Brokers Fear Annuities May Not Honor Guarantees, Financial Planning, April 7, 2009

© 2011 Society of Actuaries, All Rights Reserved

Brokers International
www.biltd.com

Cautiously, Small Investors Edge Back Into Stocks
Jack Healy, Cautiously, Small Investors Edge Back Into Stocks, New York Times, September 10, 2009

CBO letter on CLASS Act
Douglas W. Elmendorf, *Letter Analyzing Section 191 of the Affordable Health Choices Act*, Congressional Budget Office, July 6, 2009

Centers for Medicare and Medicaid Services - National Health Expenditures data – Table 1
Centers for Medicare and Medicaid Services, *National Health Expenditures data-Table 1*

Cerulli: Advisors Cool Toward Holistic Income Planning
NU Online News Service, *Cerulli: Advisors Cool Toward Holistic Income Planning*, National Underwriter Life and Health, November 19, 2009

Changing Age Distribution of the U.S. Population 1950-2050
Mark Thomas, Changing Age Distribution of the U.S. Population 1950-2050, Economist's View, September 19, 2005

Changing Channels: Insurance Company Sales Models
Rick Berry et. al., *Changing Channels: Insurance Company Sales Models*, Deloitte Debates, Deloitte

Clients Growing Tight With Advisors
NU Online News Service, *Clients Growing Tight With Advisors*, National Underwriter Life and Health, October 9, 2009

Communications With the Public
Financial Institution Regulation Authority, Communications With the Public, Regulatory Notice 09-55, September 2009

Conning: Life Settlements Slow
Trevor Thomas, Conning: Life Settlements Slow, National Underwriter Life and Health, October 8, 2009

© 2011 Society of Actuaries, All Rights Reserved

Consumers Face a Long, Hard Workout
Liam Denning, *Consumers Face a Long, Hard Workout,* Wall Street Journal, July 8, 2009

Consumption Down, Saving Rate Increases in April
Calculated Risk Finance & Economics, BEA, *Consumption Down, Saving Rate Increases in April*, June 1, 2009

Converting and Capturing The Senior Market
Curt Schumacher, *Converting and Capturing the Senior Market – A Guide to Effectively Marketing While Staying in Compliance*, Connecture, April 2009

Converting assets to income in retirement: What near-retirees are thinking
Paul J. Yakoboski, Converting assets to income in retirement: What near-retirees are thinking, TIAA-CREF Institute, Trends and Issues, October 2009

Couples don't see eye-to-eye on retirement
ProducersWeb.com, Couples don't see eye-to-eye on retirement, June 11, 2009

Crisis Reveals Opportunity and Challenges: Identifying Leadership Qualities for Navigating Change
Annuity Insight

Cross-Cohort Differences in Health on the Verge of Retirement
Beth J. Soldo, Olivia S. Mitchell, Rania Tfaily and John F. McCabe, Cross-Cohort Differences in Health on the Verge of Retirement, Population Aging Research Center, University of Pennsylvania, September 2006

Cross-Selling Can Add Life To Any P-C Agency's Growth
Warren S. Hersch, Cross-Selling Can Add Life To Any P-C Agency's Growth, National Underwriter P & C, February 4, 2008

David Macchia Blog
Davidmacchiablog.com

© 2011 Society of Actuaries, All Rights Reserved

Debt Rises for Boomers During Economic Crisis
Carole Fleck, Debt Rises for Boomers During Economic Crisis, AARP Bulletin, May 29, 2009

Demographic Trends, Housing Equity, and the Financial Security of Future Retirees
James Poterba, Steven Venti and David A. Wise, Demographic Trends, Housing Equity, and the Financial Security of Future Retirees,National Bureau of Economic Research, December 2007

Developing a Better Long-Term Care Policy: A Vision and Strategy for America's Future
Sheila P. Burke, Judith Feder, and Paul N. VandeWater (eds.), *Developing a Better Long-Term Care Policy:A Vision and Strategy for America's Future*, National Academy of Social Insurance, November 2005

Disentangling the wealth effect: a cohort analysis of household saving in the 1990s
Dean M. Maki and Michael G. Palumbo, Disentangling the wealth effect: a cohort analysis of household saving in the 1990s, American Enterprise Institute for Public Policy Research, April 2001

Do annuity alternatives for income planning make sense?
Bob Seawright, Do annuity alternatives for income planning make sense?, ProducersWeb.com, September 2, 2009

Do Households Have a Good Sense of Their Retirement Preparedness?
Alicia H. Munnell, Francesca Golub-Sass, Mauricio Soto and Anthony Webb, Do Households Have a Good Sense of Their Retirement Preparedness?, Center for Retirement Research at Boston College, August 2008, No. 8-11

Do people plan to tap their home equity in retirement?
Alicia H. Munnell, Mauricio Soto, and Jean-Pierre Aubry, *Do People Plan to Tap Their Home Equity in Retirement?*, Center for Retirement Research at Boston College, *Issue in Brief*, May 2007, no. 7-7

Don't Give Up Yet

© 2011 Society of Actuaries, All Rights Reserved

Dan Kadlec, Don't Give Up Yet, Time, October 19, 2009

Dow 10000: A Caution Sign for Investors
Brett Arends, Dow 10000: A Caution Sign for Investors, Wall Street Journal, MarketWatch, October 15, 2009

Employers altering pension plan policies
ProducersWeb.com, Employers altering pension plan policies, August 25, 2009

Employers' (Lack Of) Response To The Retirement Income Challenge
Steven A. Sass, Kelly Haverstick, and Jean-Pierre Aubry, Employers' (Lack Of) Response To The Retirement Income Challenge, Center for Retirement Research at Boston College, June 2009

Employer-Sponsored Retirement Plans, Coverage, Participation and Retirement Security, May 2009
The Spark Institute, *The Case for Employer-Sponsored Retirement Plans-Coverage, Participation and Retirement Security*, May 2009

ETF's Encroaching on Mutual Fund Turf
Tom Lydon, ETF's Encroaching on Mutual Fund Turf, ETF Trends, November 26, 2009

Evaluate your retirement goals and develop a clear plan
Principal Financial Group, *Evaluate your retirement goals and develop a clear plan,* www.principal.com

Expert Explains Life Sales Slump
Warren S. Hersch, Expert Explains Life Sales Slump, National Underwriter Life and Health, September 2, 2009

Explaining Why So Many People Do Not Save
Annamaria Lusardi, Explaining Why So Many People Do Not Save, Center for Retirement Research at Boston College, September 2001

FA Sales Skyrocketed In '08 While VA Sales Plunged: LIMRA
Daniel Q. Beatrice and Joseph Montminy, FA Sales Skyrocketed In '08 While VA Sales Plunged: LIMRA, National Underwriter Life and Health, March 16, 2009

© 2011 Society of Actuaries, All Rights Reserved

Falling Markets and Risk Tolerance
David J. Drucker, Falling Markets and Risk Tolerance, Morningstar Advisor, June 25, 2009

Fee-Based Advisors Say Current Economy Makes Savings Accumulation Through Tax Deferral More Important than Ever
Deborah Newman, *Fee-Based Advisors Say Current Economy Makes Savings Accumulation Through Tax Deferral More Important than Ever*, Jefferson National, July 22, 2009

Few Changed Investing Habits in 2008, Hewitt Reports
Money Management Executive, Few Changed Investing Habits in 2008, Hewitt Reports, Financial Planning, May 14, 2009

Fidelity Outsources GWB Production to MetLife
Fidelity Outsources GWB Production to MetLife, Retirement Income Journal, November 18, 2009

Financial Advisors Say Guaranteed Income Products Too Complicated—Want More 'Explainable' Products for Their Clients
Catherine Theroux, Financial Advisors Say Guaranteed Income Products Too Complicated—Want More 'Explainable' Products for Their Clients, InsuranceNewsNet Magazine, May 10, 2010

Financial Literacy and Retirement Planning: New Evidence from the Rand American Life Panel
Annamaria Lusardi and Olivia Mitchell, Financial Literacy and Retirement Planning: New Evidence from the Rand American Life Panel, Michigan Retirement Research Center, University of Michigan, October 2007

Financial Literacy and Stock Market Participation
Maarten van Rooij, Annamaria Lusardi and Rob Alessie, Financial Literacy and Stock Market Participation, National Bureau of Economic Research, October 2007

FINRA defends its authority over B-D's dispensing financial advice
Sara Hansard, FINRA defends its authority over B-D's dispensing financial advice, Investment News, August 19, 2009

© 2011 Society of Actuaries, All Rights Reserved

FINRA Podcast - Deferred Variable Annuities
FINRA Podcast, *Deferred Variable Annuities*, FINRA

Focus on Immediate Annuities
Sue Sell, *Focus on Immediate Annuities*, *Product Development News*, no. 60, Society of Actuaries, November 2004

For Your Business: Thinking Strategically for 2009 and Beyond
BGA Insurance, *For Your Business: Thinking Strategically for 2009 and Beyond*, April 13, 2009

Framing and Annuities
Jeffrey R. Brown, Jeffrey R. Kling, Sendhil Mullainathan and Marian V. Wrobel, Framing and Annuities, TIAA-CREF Institute, January 2009

Generations Online in 2009
Sydney Jones and Susannah Fox, Generations Online in 2009, Pew Internet, January 28, 2009

Genworth 2009 Cost of Care Survey
Genworth Financial, Genworth 2009 Cost of Care Survey Home Care Providers, Adult Day Health Care Facilities, Assisted Living Facilities, and Nursing Homes, 2009

Gloomy fund investors
Mark Hulbert, Gloomy fund investors, Wall Street Journal, MarketWatch, October 13, 2009

Got Anger? ShareOwners.Org Cites Investor Indignation
Editorial Staff, Got Anger? ShareOwners.Org Cites Investor Indignation, Retirement Income Journal, July 8, 2009

Group Probes Free-Meal Seminars
NU Online News Service, Group Probes Free-Meal Seminars, National Underwriter Life and Health, November 13, 2009

Guidelines for Withdrawal Rates and Portfolio Safety During Retirement

John J. Spitzer, Jeffrey C. Strieter and Sandeep Singh, Guidelines for Withdrawal Rates and Portfolio Safety During Retirement, Financial Planning Association Journal, 2007

H.R. 2748, The Retirement Security Needs Lifetime Pay Act of 2009
WashingtonWatch.com, H.R. 2748, The Retirement Security Needs Lifetime Pay Act of 2009

Hancock Variable Annuity Simplified to Rival Funds
Steve Garmhausen, *Hancock Variable Annuity Simplified to Rival Funds*, Financial Planning, June 16, 2009

Health Care Costs Drive Up the National Retirement Risk Index
Alicia H. Munnell, Mauricio Soto, Anthony Webb, Francesca Golub-Sass, and Dan Muldoon, Health Care Costs Drive Up the National Retirement Risk Index, Center for Retirement Research at Boston College, February, 2008

Hedging programs save insurers $40 billion during economic crisis
Peter Sun, Ken Mungan, Hedging programs save insurers $40 billion during economic crisis, Milliman, November 2008

Home Equity and At-Need Annuities–A Dynamic Long-Term Care Funding Duo
Housing in Retirement Monograph, Society of Actuaries, September 2009

Home Equity and At-Need Annuities–A Dynamic Long-Term Care Funding Duo
Steve Cooperstein, Home Equity and At-Need Annuities–A Dynamic Long-Term Care Funding Duo, Housing in Retirement Monograph, Society of Actuaries, 2009

Home Equity Conversion (Reverse) Mortgages Exploited to Defraud Senior Citizens
Federal Bureau of Investigation, Home Equity Conversion (Reverse) Mortgages Exploited to Defraud Senior Citizens, March 24, 2009

House Bill Targets 401(k) Advice

© 2011 Society of Actuaries, All Rights Reserved

Arthur D. Postal, House Bill Targets 401(k) Advice, National Underwriter Life and Health, July 6, 2009

Household demand for variable annuities
Jeffrey R. Brown, James M. Poterba, Household demand for variable annuities, Center for Retirement Research at Boston College, March 2004

How Much Confidence Do Americans Have in Financial Institutions?
John MacDonald, How Much Confidence Do Americans Have in Financial Institutions?, Employee Benefit Research Institute, Fast Facts, no. 126, June 11, 2009

How Much Have American Workers Saved for Retirement?
Employee Benefit Research Institute, *How Much Have American Workers Saved for Retirement?*, Fast Facts, April 16, 2009, no. 119

How much risk is acceptable?
Alicia H. Munnell, Anthony Webb, Alex Golub-Sass, How much risk is acceptable?, Center for Retirement Research at Boston College, Issue in Brief, no. 8-20, November 2008

How the housing crash hurts your retirement
Walter Updegrave, How the housing crash hurts your retirement, CNNMoney.com, September 2, 2008

How to attract online consumers to your website you're your products
Mary M. Art, How to attract online consumers to your website you're your products, InsuranceNewsNet Magazine, vol. 2, no. 8, August 2009

How to Build a Portfolio Wisely and Safely
Jeff D. Opdyke, *How to Build a Portfolio Wisely and Safely*, Wall Street Journal, July 25, 2009

Ignorance is not bliss: the importance of Financial education
Robert L. Clark, and Madeleine B. d'Ambrosio, Ignorance is not bliss: the importance of Financial education, TIAA-CREF Institute, Research Dialogue #78, December 2003

Immediate Annuities and Retirement Income Portfolios

© 2011 Society of Actuaries, All Rights Reserved

Timothy E. Hill and Susan J. Sell, Immediate Annuities and Retirement Income Portfolios, Milliman, 2008

Implications of a Bear Market for Retirement Security
Christopher B. Philips, Colleen M. Jaconetti and Francis M. Kinniry Jr., Implications of a Bear Market for Retirement Security, Vanguard Investment Counseling and Research, 2009

In Recession's Wake, The Affluent Get Back to Basics
Warren Hersch, In *Recession's Wake, The Affluent Get Back to Basics*, National Underwriter Life and Health, October 19, 2009

In their dreams: what will boomers be left?
John Gist and Carlos Figueiredo, In their dreams: what will boomers be left?, AARP Public Policy Institute, Data Digest, May 2006

Including Fixed Income Annuity in a Retirement Income Portfolio May Increase Long-Term Wealth as Well as Retirement Income Security
Earthtimes.org, Including Fixed Income Annuity in a Retirement Income Portfolio May Increase Long-Term Wealth as Well as Retirement Income Security, AnnuityShopper.com, September 12, 2007

Income-Oriented Advisors Seek Validation: Survey
Retirement Income Journal, Income-Oriented Advisors Seek Validation: Survey, November 18, 2009

Increasing Annuitization of 401(k) Plans with Automatic Trial Income
William G. Gale, J. Mark Iwry, David C. John and Lina Walker, *Increasing Annuitization of 401(k) Plans with Automatic Trial Income*, The Retirement Security Project, no. 2008-2, Brookings, June 2008

Inflation Cushion
Kerry Pechter, *Inflation Cushion*, Retirement Income Journal, September 16, 2009

Innovative Retirement Income and Old-Age Insurance Products: The Perspective of the Retirement Income Industry Association
Francois Gadenne, David Macchia, Al Turco and Bob Del Col, *Innovative Retirement Income and Old-Age Insurance Products: The*

© 2011 Society of Actuaries, All Rights Reserved

Perspective of the Retirement Income Industry Association, Retirement Income Industry Association, October 2006

Insurer Targets Mass Affluent
NU Online News Service, *Insurer Targets Mass Affluent*, National Underwriter Life and Health, January 11, 2010

Insurers Will Need to Scrutinize Individual Annuities
Carrie Burns, Insurers Will Need to Scrutinize Individual Annuities, Financial Planning, April 29, 2009

Integrity Lost
Mitch Anthony, *Integrity Lost*, Financial Advisor, September 2009

Introducing the Sequent Income Model™
Joe Elsasser and Dan Trumblee, Introducing the Sequent Income Model™, Sequent

Is Retirement Depressing?: Labor Force Inactivity and Psychological Well-Being in Later Life
Kerwin Kofi Charles, Is Retirement Depressing?: Labor Force Inactivity and Psychological Well-Being in Later Life, National Bureau of Economic Research, June 2002

Is There a 401(k) Fix?
Stephen Gandel, Is There a 401(k) Fix?,Time, October 14, 2009

Issues Facing Distribution Leaders
Lucian J. Lombardi, Issues Facing Distribution Leaders, LIMRA's MarketFacts Quarterly, spring 2009

It's All Relative: Understanding the Retirement Prospects of Baby-Boomers
Barbara A. Butrica, Howard M. Iams and Karen E. Smith, It's All Relative: Understanding the Retirement Prospects of Baby-Boomers,Center for Retirement Research at Boston College, November 2003

Kaiser slides - Medicare Advantage Enrollment, 1999-2009

© 2011 Society of Actuaries, All Rights Reserved

Kaiser Family Foundation, *Medicare Advantage Enrollment, 1999-2009,* May 13, 2009

Kaiser slides - Prescription Drug Coverage Among Medicare Beneficiaries, 2009
Kaiser Family Foundation, *Prescription Drug Coverage Among Medicare Beneficiaries, 2009*, May 13, 2009

Labor Department nixes Bush OK to let brokers advise 401(k) plans
Sara Hansard, Labor Department nixes Bush OK to let brokers advise 401(k) plans, Investment News, September 14, 2009

Lessons Learned
Jeff Schlegel, *Lessons Learned*, Financial Advisor, September 2009

Life & Annuity Industry Trends, 7th Annual Product Development Actuary Symposium, June 2007
Fitch Ratings, *Life & Annuity Industry Trends,*Society of Actuaries 7th Annual Product Development Actuary Symposium, June 25, 2007

Life & Annuity Industry Trends, Product Development Actuary Symposium, June 2007
Fitch Ratings, *Life & Annuity Industry Trends*, Society of Actuaries 7th Annual Product Development Actuary Symposium, June 25, 2007

Life Expectancy at age 65 by Sex and Calendar Year (Based on SSA Period Tables)
Social Security Administration, Life Expectancy at age 65 by Sex and Calendar Year (Based on SSA Period Tables)

Life insurance cfo survey #10: distribution issues
Towers Perrin, *Life Insurance CFO Survey #10: Distribution Issues*, May 2005

Life insurance, annuities are still long-term decisions
Janet Kidd Stewart, *Life Insurance, annuities are still long-term decisions*, Chicago Tribune, January 25, 2009

Lifetime Income Disclosure Act

© 2011 Society of Actuaries, All Rights Reserved

Johnny Isakson Press Release, *Senators Introduce Bipartisan Bill to Help Americans Better Prepare for Retirement*, December 3, 2009

LIMRA Analyzes Immediate Annuity Buyers
NU Online News Service, *LIMRA Analyzes Immediate Annuity Buyers*, National Underwriter Life and Health, November 24, 2010

LIMRA Head Sees Opportunity
Trevor Thomas, *LIMRA Head Sees Opportunity*, National Underwriter Life and Health, October 28, 2009

LIMRA Probes Consumer Attitudes
Trevor Thomas, LIMRA Probes Consumer Attitudes, National Underwriter Life and Health, October 29, 2009

LIMRA: Individual Life Premium Up 8%
NU Online News Service, LIMRA: Individual Life Premium Up 8%, National Underwriter Life and Health, March 4, 2008

LIMRA: Individual Life Sales Stay Positive in Q2
InsuranceNewsNet, *LIMRA: Individual Life Sales Stay Positive in Q2,* InsuranceNewsNet.com, August 25, 2010

Lincoln Financial wins latest round in variable annuities methodology patent case
Bob Graham, Lincoln Financial wins latest round in variable annuities methodology patent case, Insurance & Financial Advisor, June 29, 2009

Long Term Care Insurance Buyers Researched In Study
Armen Hareyan, Long Term Care Insurance Buyers Researched In Study, Emax Health, June 22, 2009

Long-Term Care in Health Care Reform: Policy Options to Improve Both
Harriet L. Komisar, Anne Tumlinson, Judy Feder and Sheila Burke, The Scan Foundation, July 2009

Long-Term Care IQ
MetLife, MetLife Long-Term Care IQ, MetLife Mature Market Institute, September 2009

© 2011 Society of Actuaries, All Rights Reserved

LTCI Finally Making Its Mark: The 2010 Long Term Care Insurance Market Study
Heather Trese, *LTCI Finally Making Its Mark: The 2010 Long Term Care Insurance Market Study*, Agent Sales Journal, September 1, 2010

Majority of U.S. Companies Slow to Realize Central Role in Helping Employees Achieve a Secure Retirement
Wall Street Journal, Majority of U.S. Companies Slow to Realize Central Role in Helping Employees Achieve a Secure Retirement, MarketWatch

Make Money, Whatever Happens to the Economy
Mark Gongloff, Make Money, Whatever Happens to the Economy, Wall Street Journal, July 26, 2009

Making Retirement Income Last a Lifetime
John Ameriks, Robert Veres and Mark J. Warshawsky, Making Retirement Income Last a Lifetime, Financial Planning Association Journal, 2001

Making Your Nest Egg Last a Lifetime
Anthony Webb, Making Your Nest Egg Last a Lifetime, AARP Public Policy Institute, Insight on the Issues #I32, June 2009

Managing Post-Retirement Risks
Committee on Post Retirement Needs and Risks, Managing Post-Retirement Risks: A Guide to Retirement Planning, Society of Actuaries, October 2008

Managing Risks In A Market Meltdown
Paul J. Yakoboski, Managing Risks In A Market Meltdown, TIAA-CREFF Institute, Trends and Issues, June 2009

Many Baby Boomers Concerned About Retirement Savings, Taking Less Action, Scottrade/BetterInvesting
Kelly Doria, Many Baby Boomers Concerned About Retirement Savings, Taking Less Action, Scottrade/BetterInvesting, Reuters, February 12, 2008

Many Workers Will Outlive Retirement Savings

© 2011 Society of Actuaries, All Rights Reserved

WebCPA.com, Many Workers Will Outlive Retirement Savings, Bank Investment Consultant, November 12, 2009

Marketing to baby boomers: Embracing demographic change
Brian Lucius, *Marketing to baby boomers: Embracing demographic change*, ProducersWeb.com, September 15, 2009

MassMutual Analysis: Whole Life Insurance Can Help Supply Retirement Income, Preserve Equity Portfolios During Bear Markets
MassMutual, August 27, 2009

Mature Market Experts
Tmann.com

MetLife Teams With Wilshire
NU Online News Service, *MetLife Teams With Wilshire*, National Underwriter Life and Health, May 4, 2009

Mining Retirement Income
Deloitte, *Mining the Retirement Income Market*, May 2009

Mirror, Mirror On The Wall
Richard B. Wagner, *Mirror, Mirror On The Wall…*, Financial Advisor, September 2009

Money for life: The hidden costs
Walter Updegrave, Money for life: The hidden costs,CNNMoney.com, September 24, 2007

Moody's: Mutuals Outperform
NU Online News Service, Moody's: Mutuals Outperform, National Underwriter Life and Health, August 7, 2009

Moody's: Secondary Market Woes Bad For Life Sales
Trevor Thomas, Moody's: Secondary Market Woes Bad For Life Sales, National Underwriter Life and Health, November 12, 2009

More Advisors Using Guaranteed Income Streams
Linda Koco, *Cerulli: More Advisors Using Guaranteed Income Streams,* National Underwriter Life and Health, May 12, 2010

© 2011 Society of Actuaries, All Rights Reserved

Most LTC Buyers Pick Home Care: Unum
NU Online News Service, Most LTC Buyers Pick Home Care: Unum, National Underwriter Life and Health, November 13, 2009

Most Seniors To Stick With Medicare Plans
NU Online News Service, Most Seniors To Stick With Medicare Plans, National Underwriter Life and Health, November 10, 2009

Most Trusted Professionals to Give Advice
Harris Interactive, Most Trusted Professionals to Give Advice

Moving from financial planning to financial life planning
Elizabeth Jetton, Moving from financial planning to financial life planning, TIAA-CREF Institute, Trends and Issues, August 2009

MyMoney.Gov
MyMoney.Gov

myretirementshop
MyRetirementShop.com

NAIC Alert: Annuities and Senior Citizens
Massachusetts Office of Consumer Affairs & Business Regulation, NAIC Alert: Annuities and Senior Citizens, www.mass.gov

NAIC Panels Vote To Re-Grade Mortgage Securities
Daniel Hays, NAIC Panels Vote To Re-Grade Mortgage Securities, National Underwriter Life and Health, October 15, 2009

NAILBA Speaker: Help Us Face Threats
Linda Koco, NAILBA Speaker: Help Us Face Threats, National Underwriter Life and Health, November 13, 2009

Nationwide Updates Menu
NU Online News Service, *Nationwide Updates Menu*, National Underwriter Life and Health, May 4, 2009

New Product Pays Guaranteed Income On Managed Accounts

Alan Lavine, *New Product Pays Guaranteed Income On Managed Accounts*, Registered Rep., August 18, 2009

New Realities of the Job Market for Aging Baby Boomers
MetLife Mature Market Institute, David DeLonge & Associates, The MetLife Study of the New Realities of the Job Market for Aging Baby Boomers, October 2009

New Retirees Often Make Poor Decisions
Financial Advisor, New Retirees Often Make Poor Decisions, May 19, 2010

New Technologies Simplify Life Insurance Sales and Creates Opportunities For Work At Home Virtual Ag
Chris Beard, New Technologies Simplify Life Insurance Sales and Creates Opportunities For Work At Home Virtual Ag, a1articles, August 23, 2009

Not Without Risk
Geoff Considine, Not Without Risk, Financial Planning, September 1, 2009

NY Life Woos RIA's
Donna Mitchell, *NY Life Woos RIA's*, Financial Planning, December 1, 2009

Obama Aides See Signs of Recovery but Say It Will Be Slow
Edmund L. Andrews, Obama Aides See Signs of Recovery but Say It Will Be Slow, New York Times, August 2, 2009

Older Workers on the Move: Recareering in Later Life
Richard W. Johnson, Janette Kawachi and Eric K. Lewis, *Older Workers on the Move: Recareering in Later Life*, AARP Public Policy Institute, April 2009

Older workers: Are there more older people in the workplace?
US Bureau of Labor Statistics, *Older Workers: Are there more older people in the workplace?*, July 2008

Only One-Quarter of Americans Say Banks are Honest and Trustworthy

© 2011 Society of Actuaries, All Rights Reserved

Harris Interactive, Only One-Quarter of Americans Say Banks are Honest and Trustworthy, June 30, 2009

Optimal Retirement Asset Decumulation Strategies: The Impact of Housing Wealth
Wei Sun, Robert K. Triest and Anthony Webb, Optimal Retirement Asset Decumulation Strategies: The Impact of Housing Wealth, Center for Retirement Research at Boston College, November 2006

Optimizing the Retirement Portfolio: Asset Allocation, Annuitization, and Risk Aversion
Wolfram J. Horneff, Raimond Maurer, Olivia S. Mitchell and Ivica Dus, Optimizing the Retirement Portfolio: Asset Allocation, Annuitization, and Risk Aversion, National Bureau of Economic Research, July 2006

Outlook For Life, Health Remains Negative: S&P
NU Online News Service, Outlook For Life, Health Remains Negative: S&P, National Underwriter Life and Health, April 16, 2009

Page 11 of Guaranteed Living Benefits: Before the Meltdown
Sue (Sell) Saip, *Guaranteed Living Benefits: Before the Meltdown,* Society of Actuaries, Product Matters #74, June 2009

PIMCO Real Income 2019 Fund A (PCIAX)
AllianzInvestors.com, PIMCO Real Income 2019 Fund A (PCIAX)

Plan Investment Options and Participant Behavior
Mimi Lord, Plan Investment Options and Participant Behavior, Research Summary, TIAA-CREF Institute, June 2006

Planners Fight Back On Fiduciary Standard
Arthur D. Postal, *Planners Fight Back On Fiduciary Standard,* National Underwriter Life and Health, March 11, 2010

Pricing Variable Annuity Guaranteed Living Benefits in an Extraordinary Time
Xiaohong Mo, Wendy Yawen Yu and Frank Zhang, *Variable Annuity Guaranteed Living Benefits-Does Industry Pricing Still Make Sense?*, Society of Actuaries Life 2009 Spring Meeting, May 18, 2009,

© 2011 Society of Actuaries, All Rights Reserved

PRIVATE PENSIONS: Alternative Approaches Could Address Retirement Risks Faced by Workers but Pose Trade-offs
US Government Accountability Office, PRIVATE PENSIONS: Alternative Approaches Could Address Retirement Risks Faced by Workers but Pose Trade-offs, Report to Chairman, Committee on Education and Labor, House of Representatives, July 2009

Product Trends in Life Insurance
Mike Brown and Keith Dall, The Actuary Magazine, June 2006, Society of Actuaries

Providing Income for a Lifetime: Bridging the Gap between Academic Research and Practical Advice
Anthony Webb, *Providing Income for a Lifetime: Bridging the Gap between Academic Research and Practical Advice*, AARP Public Policy Institute, June 2009

Pru Finds Retirement Savings Rebounding
NU Online News Service, Pru Finds Retirement Savings Rebounding, National Underwriter Life and Health, November 13, 2009

Prudential, Hewitt Partner on Guaranteed Income Option for 401(k)s
Money Management Executive, *Prudential,Hewitt Partner on Guaranteed Income Option for 401(k) s*, Financial Planning, May 1, 2009

Public Attitudes Toward Different Industries
Harris Interactive, Public Attitudes Toward Different Industries

Public Misperceptions About Retirement Security
Eric T. Sondergeld and Mathew Greenwald, Public Misperceptions About Retirement Security, LIMRA International, Inc., Society of Actuaries, and Mathew Greenwald & Associates, 2005

Rating Agency - The CDS Market Is A Tough Grader
Allison Bell, Rating Agency: The CDS Market Is A Tough Grader, National Underwriter Life and Health, October 27, 2009

Rebuilding what was lost in 2008 -- how long might it take?
Principal Financial Group, Rebuilding what was lost in 2008 -- how long might it take?

© 2011 Society of Actuaries, All Rights Reserved

Recession Dot Net
Lee Rainie and Aaron Smith, *Recession Dot Net*, PewResearchCenter Publications, July 15, 2009

Recessions And Older Workers
Alicia H. Munnell, Dan Muldoon and Steven A. Sass, Recessions And Older Workers, Center for Retirement Research at Boston College, Issue in Brief, no. 9-2, January 2009

Request for Information Regarding Lifetime Income Options for Participants and Beneficiaries in Retirement Plans
US Department of Labor, *Request for Information Regarding Lifetime Income Options for Participants and Beneficiaries in Retirement Plans*, Federal Register, vol. 75, no. 21, February 2, 2010

Request for Proposals–Implications of the Perceptions of Post Retirement Risk for the Life Insurance Industry
Society of Actuaries, Request for Proposals–Implications of the Perceptions of Post Retirement Risk for the Life Insurance Industry, www.soa.org

Response 682 to Request for Information Regarding Lifetime Income Options for Participants and Beneficiaries in Retirement plans
Jason Scott, *Request for Information Regarding Lifetime Income Options for Participants and Beneficiaries in Retirement plans*, Department of Labor Employee Benefits Security Administration Lifetime Income Options Request for Information, May 3, 2010

Response 685 (last paragraph) to Request for Information Regarding Lifetime Income Options for Participants and Beneficiaries in Retirement Plans
Steve Cooperstein, *Request for Information Regarding Lifetime Income Options for Participants and Beneficiaries in Retirement plans*, Department of Labor Employee Benefits Security Administration Lifetime Income Options Request for Information, May 3, 2010

Retirement Confidence Survey - 2007 Results - Saving for Retirement in America

© 2011 Society of Actuaries, All Rights Reserved

Ruth Helman, Jack VanDerhei and Craig Copeland, Retirement Confidence Survey - 2007 Results - Saving for Retirement in America, Employee Benefit Research Institute, Issue Brief#304, April 2007

Retirement Guarantees Could Stem Rollovers
John Morgan, *Retirement Guarantees Could Stem Rollovers: Funds Partner with Insurers to Secure Pre-Retiree Assets* , Financial Planning, November 5, 2009

Retirement Income Is Key: Survey
NU Online News Service, Retirement Income Is Key: Survey, National Underwriter Life and Health, September 18, 2009

Retirement Income Software Needs Sprucing Up: Experts
Linda Koco, *Retirement Income Software Needs Sprucing Up: Experts,* National Underwriter Life and Health, August 3, 2009

Retirement Income Solutions for a Changing Market
Sun America, Retirement Income Solutions for a Changing Market Investor Guide, April 2009

Retirement savers respond to the market meltdown
Paul J. Yakoboski, Retirement Savers Respond to the Market Meltdown: Avoiding the "Hail Mary" in Higher Education, TIAA-CREF Institute, Trends and Issues, September 2009

Retirement Saving in Wake of Financial Market Volatility
Brian Reid, Sarah Holden, Retirement Saving in Wake of Financial Market Volatility, Investment Company Institute, December 2008

Retirement Security or Insecurity?
AARP, *Retirement Security or Insecurity – The Experience of Workers Aged 45 and Older*, International Communications Research, October 2008

Retirement Trends in the United States Over the Past Quarter-Century
Employee Benefit Research Institute, Retirement Trends in the United States Over the Past Quarter-Century, Facts from EBRI, June 2007

© 2011 Society of Actuaries, All Rights Reserved

Retirement vulnerability of new retirees: The likelihood of outliving their assets
Ernst & Young, *Retirement vulnerability of new retirees: The likelihood of outliving their assets,*July 2008

Retirement: A Field in Flux
Francois Gadenne, Retirement: A Field in Flux, Research Magazine, August 1, 2009

Retiring? Pay Off Your Mortgage
Tom Lauricella, Retiring? Pay Off Your Mortgage, Wall Street Journal, August 16, 2009

Reverse Mortgage Problems Linked To Annuities At Hearing
Trevor Thomas, Reverse Mortgage Problems Linked To Annuities At Hearing, National Underwriter Life and Health, December 16, 2007

Reverse mortgages and CV life insurance -- A lawsuit in waiting
Roccy DeFrancesco, Reverse mortgages and CV life insurance -- A lawsuit in waiting, ProducersWeb.com, September 16, 2009

Reverse Mortgages: A Closer Look at HECM Loans
Tonja Bowen Bishop and Hui Shan, Reverse Mortgages: A Closer Look at HECM Loans, National Bureau of Economic Research, September 2008

RIA's Remain Skeptical About Annuities
Donna Mitchell, RIA's Remain Skeptical About Annuities, Financial Planning, May 4, 2009

Savings Needed for Health Expenses in Retirement
EBRI, Savings Needed for Health Expenses in Retirement, EBRI Notes, vol. 30, no. 6, June 2009

Savings Rate and "Economic Security" in Retirement
John Norstad, Explaining Why So Many People Do Not Save, January 27, 2005

Savings Rates Rising Toward Mediocrity

© 2011 Society of Actuaries, All Rights Reserved

Catherine Rampell, Savings Rates Rising Toward Mediocrity, New York Times, June 26, 2009

Schwab Finds Advice Hunger
NU Online News Service, Schwab Finds Advice Hunger, National Underwriter Life and Health, June 22, 2009

Segmenting the Middle Market: Retirement Risks and Solutions
Noel Abkemeier and Brent Hamann, Segmenting the Middle Market: Retirement Risks and Solutions Phase I Report, Society of Actuaries, April 2009

Session 35 of the 2008 Society of Actuaries Annual Meeting
Brent Hamann, Marcia Mantell and Christopher G. Raham, Session 35, Retirement-New Products and Approaches, Society of Actuaries Annual Meeting & Exhibit, October 20, 2008

Session 90 Aging Population: Opportunities & Risks, SOA Annual Meeting, October 21, 2008
Joshua David Bank, Douglas J. Knowling and David N. Wylde, *Session 90, Aging Population: Opportunities and Risks,* SOA Annual Meeting and Exhibit, October 21, 2008

Should Annuity Firms Care About Social Media?
Ben Pousty, Should Annuity Firms Care About Social Media?, Retirement Income Journal, October 27, 2009

Smart Investing
Financial Institution Regulation Authority, *Smart Investing*, www.finra.org

Social Technology Strategies for Insurance and Other "Boring" Brands
Chad Mitchell, Social Technology Strategies for Insurance and Other "Boring" Brands, Financial Planning, May 6, 2009

Society of Actuaries (SOA) Committee on Post-Retirement Needs & Risks (CPRNR)
Society of Actuaries, *Post Retirement Needs and Risks Web Page,* www.soa.org

© 2011 Society of Actuaries, All Rights Reserved

Society of Actuaries Risks and Process of Retirement Survey
Mathew Greenwald & Associates, Inc. and Employee Benefit Research Institute, *2007 Risks and Process of Retirement Survey: Report of Findings*, Society of Actuaries, October 2007

Some Will Talk To A Financial Advisor
NU Online News Service, Some Will Talk To A Financial Advisor, National Underwriter Life and Health, October 22, 2009

Source – NewsDirect Newsletter of NM Section of the Society of Actuaries - 1999
Mark L. Trencher, *Life Insurers Seek to Capitalize on Middle-Market Opportunities*, News Direct Newsletter, Society of Actuaries, no. 32, Summer 1999

Stranger originated life insurance: malignancy or not?
Linda Koco, Stranger originated life insurance: malignancy or not?, National Underwriter Life and Health, August 10, 2009

Stranger-Owned Life Insurance: Killing the Goose That Lays Golden Eggs!
Stephan R. Leimberg, Stranger-Owned Life Insurance: Killing the Goose That Lays Golden Eggs!, Tax Analysts Viewpoints, May 2005

Study shows economy driving demand for guaranteed income products, yet annuity knowledge remains low.
Fidelity, Study shows economy driving demand for guaranteed income products, yet annuity knowledge remains low, Fidelity, March 17, 2009

Study: Advice Improves 401(k) Performance
NU Online News Service, Study: Advice Improves 401(k) Performance, National Underwriter Life and Health, January 28, 2010

SunTrust is First to Launch LifeYield ROI™
LifeYield, SunTrust is First to Launch LifeYield ROI™, October 20, 2009

Surveys, Target Dates, and More
Morningstar Analysts, Surveys, Target Dates, and More, Morningstar Advisor, October, 6, 2009

© 2011 Society of Actuaries, All Rights Reserved

Suspending the 401(k) Match: Look Before You Leap
Mercer, Suspending the 401(k) Match: Look Before You Leap, Update, April 2009

Tapping Home Equity in Retirement
MetLife Mature Market Institute, Barbara R. Stucki, National Council on Aging, *Tapping Home Equity in Retirement: The MetLife Study on the Changing Role of Home Equity and Reverse Mortgages*, MetLife Mature Market Institute, June 2009

Target Date Funds: Evaluating the Risks and Rewards
Towers Perrin, Target Date Funds: Evaluating the Risks and Rewards, Investment Perspectives, vol. 1, issue 4, 2009

That was Then … This is Now
Elaine Tumicki and Karen Terry, That was Then … This is Now, Product Matters, Society of Actuaries, no. 75, October 2009

The 2008 Retirement Confidence Survey - Americans Much More Worried About Retirement
Ruth Helman, Jack VanDerhei and Craig Copeland, The 2008 Retirement Confidence Survey - Americans Much More Worried About Retirement, Employee Benefit Research Institute, Issue Brief #316, April 2008

The 2008 retirement confidence survey: Americans much more worried about retirement
Ruth Helman, Jack VanDerhei and Craig Copeland, *The 2008 Retirement Confidence Survey:® Americans Much More Worried About Retirement, Health Costs a Big Concern*, Employee Benefit Research Institute, *Issue Brief*, no. 316, April 2008

The 2010 Retirement Confidence Survey
Retirement Confidence Survey, *Saving for Retirement in America*, 2010 RCS Fact Sheet, Source: Employee Benefit Research Institute and Mathew Greenwald & Associates, Inc., 1993–2009 Retirement Confidence Surveys.

The 4% Rule—At What Price?

© 2011 Society of Actuaries, All Rights Reserved

Jason S. Scott1, William F. Sharpe and John G. Watson, The 4% Rule—At What Price?, April 2008, www.stanford.edu

The Challenges of Using Social Media in Business
Elizabeth A. G. Schwarz, The Challenges of Using Social Media in Business, InsuranceNewsNet Magazine, vol. 2, no. 11, November 2009

The Decline in the U.S. Personal Saving Rate: Is It Real and Is It a Puzzle?
Massimo Guidolin and Elizabeth A. La Jeunesse, The Decline in the U.S. Personal Saving Rate: Is It Real and Is It a Puzzle?, Federal Reserve Bank of St. Louis, November/December 2007

The Disappearing Defined Benefit Pension and its Potential Impact on the Retirement Incomes of Boomers
Barbara A. Butrica, Howard M. Iams, Karen E. Smith, and Eric J. Toder, The Disappearing Defined Benefit Pension and its Potential Impact on the Retirement Incomes of Boomers, Center for Retirement Research at Boston College, January 2009

The Economic Crisis: How Has Hedging Changed?
Towers Watson, The Economic Crisis: How Has Hedging Changed?,Towers Watson, August 2009

The Federal Reserve Board's Survey of Consumer Finances Table 4 as of the end of 2007
Brian K. Bucks, Arthur B. Kennickell, Traci L. Mach and Kevin B. Moore, *Changes in U.S. family finances from 2004 to 2007: evidence from the Survey of Consumer Finances*, Federal Reserve, February 2009

The Fight Over Who Will Guard Your Nest Egg
Jason Zweig, The Fight Over Who Will Guard Your Nest Egg, Wall Street Journal, March 28, 2009

The four pillars of every successful personal economy
Jeffrey Reeves, The four pillars of every successful personal economy, ProducersWeb.com, April 27, 2009

The Fourth Pillar: Retirement Choices
Prudential, The Fourth Pillar: Retirement Choices, December 2008

© 2011 Society of Actuaries, All Rights Reserved

The Future of Long-Term Care: What Is Its Place in the Health Reform Debate?
Howard Gleckman, The Future of Long-Term Care: What Is Its Place in the Health Reform Debate?, Urban-Brookings Tax Policy Center

The Great Protector
Caren Chesler, *The Great Protector*, Financial Advisor, January 2010

The History of Retirement, From Early Man to A.A.R.P.
Mary-Lou Weisman , The History of Retirement, From Early Man to A.A.R.P., New York Times, March 21, 1999

The Income for Life Model
Wealth2K

The MetLife Survey of American Attitudes Toward Retirement - What's Changed?
MetLife Mature Market Institute, The MetLife Survey of American Attitudes Toward Retirement - What's Changed?, October 2005

The national retirement risk index: after the crash
Alicia H. Munnell, Anthony Webb and Francesca Golub-Sass, *The National Retirement Risk Index: After the Crash*, Center for Retirement Research at Boston College, *Issue in Brief*, no. 9.22, October 2009

The Nest As Nest Egg
NU Online News Service, *The Nest As Nest Egg*, National Underwriter Life and Health, July 16, 2009

The New Retirement Advisor
Researchmag.com, The New Retirement Advisor, Research Magazine, December 31, 2008

The New Retirement Mindscape. A groundbreaking, comprehensive study of the retirement journey
Ameriprise Financial, Age Wave, Ken Dychtwald and Harris Interactive, Inc., The New Retirement Mindscape. A groundbreaking, comprehensive study of the retirement journey, Ameriprise Financial, January 2006

© 2011 Society of Actuaries, All Rights Reserved

The New Retirement Survey From Merrill Lynch Reveals How Baby Boomers Will Transform Retirement
Merrill Lynch, "The New Retirement Survey" From Merrill Lynch Reveals How Baby Boomers Will Transform Retirement

The Next Generation
Mitch Anthony, *The Next Generation*, Financial Advisor, January 2010

The NRRI And The House
Center for Retirement Research at Boston College, *The NRRI and the House,* Center for Retirement Research at Boston College, NRRI Fact Sheet No. 1, March, 201.

The Recent Trend Towards Later Retirement
Leora Friedberg, *The Recent Trend Towards Later Retirement*, Center for Retirement Research at Boston College, *Issue in Brief*, Series 9, March 2007

The Retiree Health Care Challenge
Hewitt Associates, The Retiree Health Care Challenge, TIAA-CREF Institute, November 2006

The Retirement Patterns and Annuitization Decisions of a Cohort of TIAA-CREF Participants
TIAA-CREF Institute, The Retirement Patterns and Annuitization Decisions of a Cohort of TIAA-CREF Participants, Research Dialogues #60, August 1999

The Role Of Information For Retirement Behavior: Evidence Based On The Stepwise Introduction Of The Social Security Statement
Giovanni Mastrobuoni, The Role Of Information For Retirement Behavior: Evidence Based On The Stepwise Introduction Of The Social Security Statement, Center for Retirement Research at Boston College, October 2009

The Thrive® Income Distribution System
The Thrive® Income Distribution System, 2009

The U.S. Retirement Market, 2009

© 2011 Society of Actuaries, All Rights Reserved

Peter Brady, Sarah Holden and Erin Short, *The U.S. Retirement Market, 2009*, Investment Company Institute, *Research Fundamentals*, vol. 18, no. 3, May 2010

The VA industry: An analysis of recent activities
Peter Sun, The VA industry: An analysis of recent activities, Milliman, July 2009

The Well-Being of Retirees: Evidence Using Subjective Data
Keith A. Bender, The Well-Being of Retirees: Evidence Using Subjective Data, Center for Retirement Research at Boston College, November 2004

The Year Of The Recession
Trevor Thomas, The Year Of The Recession, National Underwriter Life and Health, November 10, 2009

The-Nest-As-Nest-Egg.
NU Online News Service, *The Nest As Nest Egg*, National Underwriter Life and Health, July 16, 2009

TIAA-CREF's TC_Talks Debuts on Twitter
TIAA-CREF, *TIAA-CREF's TC_Talks Debuts on Twitter,* www.tiaa-cref.org, September 30, 2009

Time Is Right for Standalone Lifetime Benefit (SALB)
Savita Iyer-Ahrestani, Time Is Right for Standalone Lifetime Benefit (SALB), Investment Advisor, March 26, 2009

Time.com - Cartoons of the Week
Matson, *Cartoons of the Week*, Time, February 2009

Tired of pounding the pavement?
Insurance-Mail.net

Trends in Distribution
Ted Quinn and Lucian Lombardi, *Trends in Distribution* , Society of Actuaries Life 2006 Spring Meeting, Hollywood, Florida, May 2006

Trends in Medigap Policies, December 2004 to December 2006

© 2011 Society of Actuaries, All Rights Reserved

America's Health Insurance Plans, *Trends in Medigap Policies, December 2004 to December 2006*, March 2008

Trends In The Selection Of Retirement Income Streams Among TIAA-CREF Participants
John Ameriks, *Recent Trends in the Selection of Retirement Income Streams Among TIAA-CREF Participants*, TIAA-CREF Institute, Research Dialogue, no. 74, December 2002

U.S. Census Bureau - Homeownership Rates by Age of Householder
U.S. Census Bureau, *Homeownership Rates by Age and Householder*, Housing Vacancies and Homeownership

U.S. Census Bureau Annual Estimates of the Resident Population by Sex and Five-Year Age Groups for the United States for July 1, 2008
US Census Bureau , *Annual Estimates of the Resident Population by Sex and Five-Year Age Groups for the United States: April 1, 2000 to July 1, 2008*

U.S. Individual Life Insurance Sales Trends, First Quarter 2009
Ashley Durham, *U.S. Individual Life Insurance Sales Trends First Quarter 2009*, National Fraternal Congress of America, 2009

U.S. Population Projections by age, 2008 and 2030, Baby Boomers and Millennials
Mark Schill, U.S. Population Projections by age, 2008 and 2030, Baby Boomers and Millennials, New Geography, August 25, 2008

Understanding Changes During Retirement: Results of Two Studies Webcast
Anna Rappaport, Barbara Butrica and Ruth Helman, *Understanding Changes During Retirement: Results of Two Studies Webcast*, Society of Actuaries, April 2008

Universal Life Issues
Carl A. Friedrich and Susan J. Saip, Universal Life Issues, Milliman, 2008

Unsolved Mystery

© 2011 Society of Actuaries, All Rights Reserved

Kerry Pechter, Unsolved Mystery, Retirement Income Journal, vol. 22, October 21, 2009

Updated Retirement Vulnerability Analysis: The likelihood of outliving their financial assets
Ernst & Young, *Updated Retirement Vulnerability Analysis: The likelihood of outliving their financial assets*, June 2009

VA Storm Opens Doors
NU Online News Service, FRC: *VA Storm Opens Doors*, National Underwriter Life and Health, September 10, 2009

Valuation, hedging and demand for ruin-contingent life annuities (RCLA)
Tom Salisbury, M.A. Milevsky and H. Huang, Valuation, hedging and demand for ruin-contingent life annuities (RCLA),AFIR colloquium, September 10, 2009

Value of Financial Planning study: Consumer Attitudes and Behaviors in a Changing Economy
Harris Interactive, The FPA and Ameriprise Value of Financial Planning study: Consumer Attitudes and Behaviors in a Changing Economy, Financial Planning Association, Ameriprise

Vanguard Blazes a Social Media Trail for Mutual Fund Firms
James McGovern, Vanguard Blazes a Social Media Trail for Mutual Fund Firms, Corporate Insight, May 29, 2009

Variable Annuities With Living Benefits: Worth The Fees?
Denise Appleby, Variable Annuities With Living Benefits: Worth The Fees?, Investopedia

Variable Annuities: Beyond the Hard Sell
Financial Institution Regulation Authority, *Variable Annuities: Beyond the Hard Sell*, Investor Alerts

Wanted: Better Income Plan Tools
Linda Koco, Wanted: Better Income Plan Tools, National Underwriter Life and Health, April 17, 2009

© 2011 Society of Actuaries, All Rights Reserved

Wary Investors Are Seeking Out Objective Voices Independent Advisers Are In Demand, but Picking One Means Homework
Anne Tergesen and Jane J. Kim, Wary Investors Are Seeking Out Objective Voices Independent Advisers Are In Demand, but Picking One Means Homework, Wall Street Journal, July 29, 2009

What A Difference A Year Makes
Sally A. Bryck, Betty Meredith, Anna Rappaport and Steven Siegel, What A Difference A Year Makes, LIMRA, International Foundation for Retirement Education and the Society of Actuaries, 2009

What Are The Odds?
Joel P. Bruckenstein, *What Are The Odds?*, Financial Advisor, September 2009

What Does It Cost To Guarantee Returns?
Alicia H. Munnell, Alex Golub-Sass, Richard W. Kopcke and Anthony Webb, *What Does It Cost to Guarantee Funds?*, Center for Retirement Research at Boston College, *Issue in Brief*, no. 9-4, February 2009

What happens after the free lunch
Jacob Fenkel, What happens after the free lunch, Boomer Market Advisor, August 1, 2009

What We Learned from the Market Collapse
Carl Richards, What We Learned from the Market Collapse, Financial Planning, September 1, 2009

When looking for insurance which would you do online?
WebCredible.co.uk, When looking for insurance which would you do online?

Who Prefers Annuities? Observations About Retirement Decisions
Towers Watson, Who Prefers Annuities? Observations About Retirement Decisions, Towers Watson Insider, April 2008

Why Do Boomers Plan To Work So Long?
Gordon B.T. Mermin, Richard W. Johnson, and Dan Murphy, Why Do Boomers Plan To Work So Long?, Center for Retirement Research at Boston College, November 2006

© 2011 Society of Actuaries, All Rights Reserved

Why Do Investors Sit Tight in 401(k)s?
Jason Zweig, Why Do Investors Sit Tight in 401(k)s?, Wall Street Journal, September 5, 2009

Why do people want to retire
John Draper, Why do people want to retire, posted on Gail Vaz-Oxlade's Blog, November 21, 2008

Why do people want to retire?
City-Data.com , Why do people want to retire?

Why It's Time to Retire the 401(k)
Stephen Gandel, Why It's Time to Retire the 401(k),Time, October 9, 2009

Will Assets Last a Lifetime?
Sally Bryck, Will Assets Last a Lifetime?, Society of Actuaries, LIMRA and the International Foundation for Retirement Education, 2009

Will Baby-Boomers' Retirement Years Go Bust from a Lack of Savings?
Wharton School of Business, Will Baby-Boomers' Retirement Years Go Bust from a Lack of Savings?, Wharton School of Business at University of Pennsylvania, May 21, 2003

Will Online Financial Planning Catch On?
Jason Zweig, *Will Online Financial Planning Catch On?,* Wall Street Journal Online, August 7, 2010

Will We See an Investor Shift in Risk Tolerance in the Future?
FinancialAdvisorMatch.com, Will We See an Investor Shift in Risk Tolerance in the Future?

Working Longer: The Solution to the Retirement Income Challenge
Alicia H. Munnell, Steven A. Sass, *Working Longer: The Solution to the Retirement Income Challenge*, Brookings Institution Press, May 1, 2008

Writers don't retire, why should anyone?
Adam Ash, Writers don't retire, why should anyone?, posted on Blogcritics.org, April 19, 2005

© 2011 Society of Actuaries, All Rights Reserved