MARKET INSIGHTS:
HELPING TOMORROW'S RETIREES BETTER PREPARE TODAY

A STRING FINANCIAL DEFINED CONTRIBUTION PARTICIPANT STUDY

String FINANCIAL™

Executive Summary

If tomorrow's retirees hope to achieve the financial security enjoyed by many of their parents, more disciplined retirement savings behaviors must be adopted and more extensive and efficient use must be made of mortality-contingent products. As the cornerstone of most of today's retirement plans, employer-based defined contribution plans are the natural point of delivery for both the substantial education efforts required to change participant behaviors, as well as for innovative product solutions to help participants mitigate longevity risk.

In the third quarter of 2008, String Financial surveyed over 400 defined contribution plan participants.

Key findings of our analysis include:

Even highly educated respondents are struggling with the basics. More than one-third of respondents with a four-year college degree were not familiar with dollar-cost averaging, nearly one-quarter were not familiar with asset allocation, and 12% were unfamiliar with the concept of compound interest.

Current investor education efforts are coming up short. The respondents' collective view of educational materials supplied by 401(k) providers and their employers is that they are:

- **Difficult to understand:** 34% of respondents felt the materials included terms or concepts that they did not understand and were not adequately explained;
- **A commodity product:** 41% agreed that the materials do not contain information that could not be easily found elsewhere (19% disagreed);
- **Ineffective:** Fewer than 19% of respondents indicated that the educational resources led to changes in retirement planning behaviors or practices.

Increased investor understanding equals an increase in savings. 37% of respondents agreed that if they better understood how to plan for retirement, they would save more.

Respondents' view of their retirement preparedness is not consistent with the likely reality. Figures 4–6 illustrate disconnects between respondents' actions and behaviors versus the outcome they anticipate. Among the most striking: Of the respondents that either 1) could not replace the percentage of their salary that they estimated would be necessary to maintain their current standard of living in retirement, or 2) could not estimate how much of their current salary they could replace, 47% were still **confident** in their ability to maintain their standard of living in retirement.

Despite this "confidence", significant concerns remain regarding the ability to generate income in retirement. Of the 68% of respondents that were confident in their ability to meet their overall standard of living in retirement, 71% expressed concerns about their ability to generate income to satisfy at least 2 of the 4 retirement income needs identified in the *immediately preceding* question.

Respondents working with advisers are better prepared than those that are not. Respondents that worked with advisers were significantly more likely to have their retirement expectations better aligned with the likely realities than respondents that did not have advisers. Those working with advisers also had a 44% greater median 401(k) balance and were 14% more likely to be saving at maximum levels. 30% of respondents indicated they would be more likely to contribute to their 401(k) plan if they could have a financial adviser of their choosing help them evaluate their options.

Investors may be more willing to consider mortality-contingent products than conventional wisdom suggests. Low rates of annuitization on deferred VA contracts are often cited as proof-positive that mortality-contingent products cannot succeed on a meaningful scale. Perhaps it is instead an indication that we have failed to frame the issues properly for investors. Figures 13-15 illustrate respondents' willingness to consider mortality-contingent products and guarantees. Instead of using product or technical terms such as "annuity" or "annuitize" respondents received a brief explanation of decision trade-offs. Respondent interest in mortality-contingent options was significantly higher than what conventional wisdom would suggest. One, perhaps telling, observation: 41% of respondents that did not own a deferred annuity expressed interest in the concept of annuitization versus only 22% that did own a deferred annuity.

Tremendous opportunities exist for companies that can help Americans improve their retirement preparedness.

String Financial seeks to do so by:

- Re-evaluating the approach to participant education
- Developing financial products to mitigate longevity risk
- Creating services that facilitate portfolio monitoring and portfolio management

The more detailed discussion that follows reflects the principles that shape our approach for helping tomorrow's retirees begin better preparing today.

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Tables and Figures

Introduction

By now, we have become almost numb to the steady stream of research and news reports that cite yet another metric by which Americans' lack of retirement preparedness can be measured. It is therefore "settled law" that:

- The decline of Defined Benefit (DB) plans has put the onus for retirement savings squarely on the shoulders of individuals;
- Individuals are generally under-saving for retirement, and even "adequate" savers are largely ill-equipped to address the risks inherent in a retirement that may rival their careers in longevity;
- Without significant changes in behavior, more future retirees than not will be facing a "working retirement", a retirement that is financially and emotionally less rewarding than envisioned, a retirement that lasts longer their money, or some combination of the three.

The prescription for avoiding this fate is also well documented; increase retirement savings and increase the use of mortality-contingent products that replicate the benefits of that now rare species, the pension. The question of course, is "How?"

Since retirement planning begins (and all too often ends) with defined contribution plans, it is our view that most effective way to reach investors is through employer-sponsored plans. To better understand the needs and concerns of participants, in the third quarter of 2008 (prior to the market break), String Financial surveyed over 400 401(k) and other defined contribution plan participants.[1] The survey included questions on:

- Familiarity with financial products and terminology
- Retirement savings behaviors and habits
- Opinions on educational materials, tools and advice
- Views on retirement security
- Attitudes toward long-term benefit deferral and income vs. bequest preferences

The pages that follow detail the results of our findings. Two observations we found particularly noteworthy:

1. **People are not as averse to the principle of life-contingent payouts as annuitization experience and conventional wisdom suggests.** Mortality credits, particularly at advanced ages, offer returns difficult to match in other asset classes. Improving the way the investment decision is framed for investors may encourage more effective use of life-contingent products.
2. **There are some profound disconnects between investors' retirement expectations and the likely realities based upon their current habits.** Not too surprisingly, investors often express greater confidence in their retirement preparedness than their habits warrant. This is not to suggest most respondents are blithely unaware of economic realities. Indeed, many respondents who expressed retirement confidence despite poor savings and planning habits also revealed several concerns in more detailed questioning. Harnessing this cognitive dissonance (perhaps a bit easier in light of the 2008 market break) is critical to changing investor behaviors and improving retirement outcomes.

As we dig deeper into these key findings, opportunities for better helping participants prepare for retirement begin to emerge.

Participant Profile

Participants were split almost evenly between women (50.2%) and men (49.8%). The average age of respondents was 39.7 and the median age was 37. Three respondent characteristics of note:

Respondents were generally high wage earners.

Nearly 50% of respondents earned a salary of $100,000 per year or greater. About half of the respondents (49%) were married with a working spouse. Of this group, 54% had family income of $150,000 per year or greater.

Respondents were generally highly educated.

90% of respondents had a least a 4-year college degree, and a majority of respondents, 57%, had a graduate degree.

Respondents were generally high savers.

46% of respondents reported saving 11% or more of their income for retirement, though 1 in 5 respondents reported saving 3% per year or less.

Appendix A includes aggregated views of the respondent sample across multiple criteria.

Investor Knowledge & Perceptions

Familiarity with Concepts

We asked participants about the extent of their familiarity with a dozen financial planning concepts from the simple to the sophisticated. Since our respondent profile skewed toward the more highly educated, we thought it would be more useful to isolate the responses of those individuals to get a sense of the financial literacy of the highly educated.

Figure 1 illustrates the responses of the 266 respondents who identified themselves as having at least a 4-year college degree. Notably, 63% of these respondents had a graduate degree.

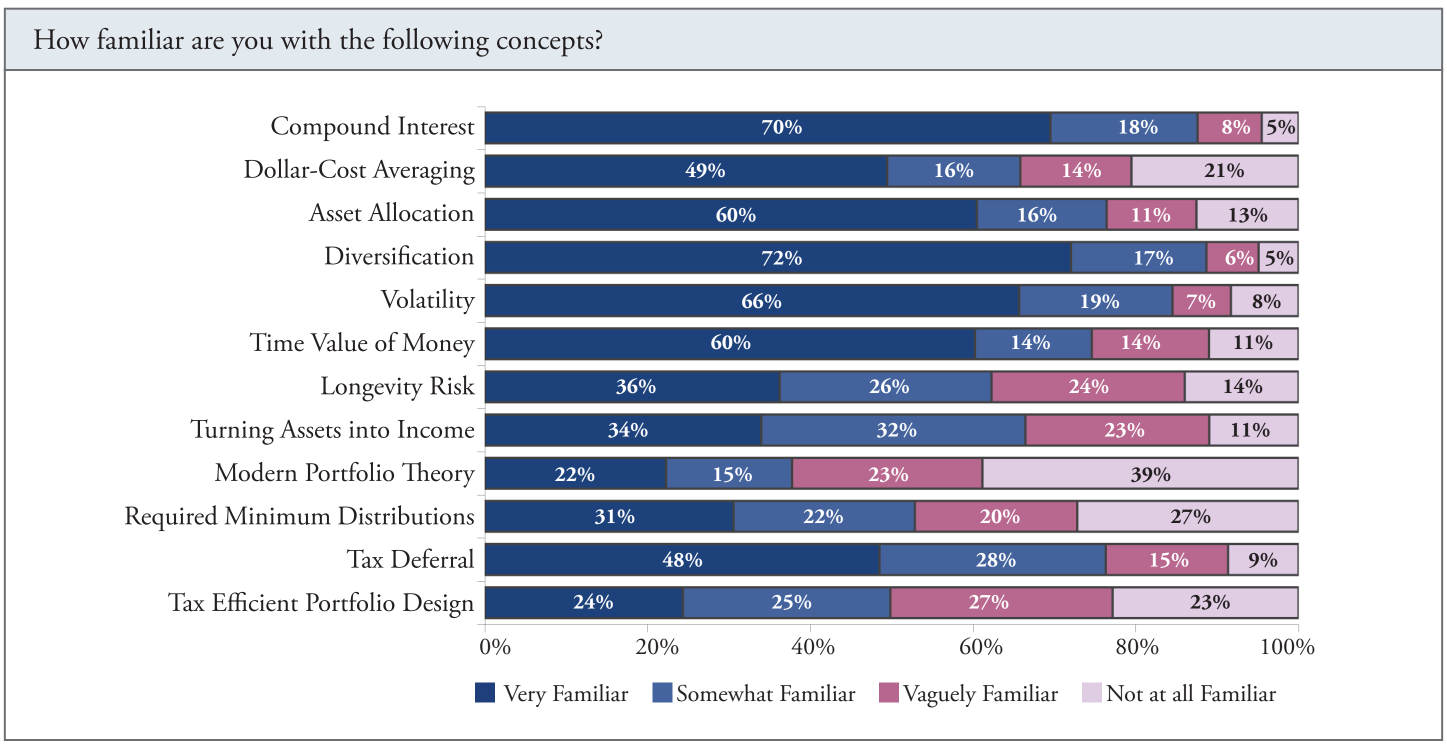
The results do show that a subset of the group claim a relatively extensive understanding of financial planning concepts–the least familiar concept, Modern Portfolio Theory, was still familiar to 38% of respondents. More surprising is the high level of unfamiliarity of more basic concepts from this highly educated group. Table 1 lists those of particular note.

If the survey were administered to a representative sample of 401(k), 403(b), and 457(b) participants, the percentages in Table 1 would likely be higher.

Table 1: Degree of Concept Unfamiliarity of Highly Educated Respondents.

Concept	Respondents Unfamiliar
Compound interest	12 %
Asset allocation	24 %
Tax deferral	24 %
Time value of money	25 %
Dollar-cost averaging	34 %

Figure 1: Familiarity with financial planning concepts of respondents with at least a 4-year college degree.



Why are so Many People Struggling with the Basics?

Based on the feedback of respondents to this survey, part of the answer may lie with materials provided by 401(k) providers and employers. Figure 2 below illustrates the answers of all respondents (not just the highly educated subset) to 8 questions regarding the educational materials provided by their 401(k) providers and employers.

In general, respondents were not particularly passionate one way or the other about the materials provided as "Neither Agree Nor Disagree" was most popular response for all but one question. The extent to which this reflects respondents not actually reviewing these materials or their ambivalence about them is unclear. Two obvious shortcomings, in the view of respondents include:

- 34% thought materials included terms or concepts they did not understand and were not adequately explained
- 41% agreed that the materials do not contain information that could not easily be found somewhere else (19% disagreed).

Even areas that had relatively high marks were in need of improvement. While 47% of the respondents agreed that the web interface was intuitive and easy to use (12% disagreed) and 40% agreed that explanations were generally clear and concise (18% disagreed), few consumer product companies would be pleased with a 12%–18% "dissatisfied" rating.

The ultimate purpose of these materials is to educate and effect positive change in participants' retirement savings practices. Based on the respondents to this survey, the efforts of 401(k) providers and employers have not been widely successful.

To be sure, the participant must be a "willing learner" and no matter what educational materials are provided, if the participant is not motivated to improve his or her retirement planning literacy and take action, the cause of advancing retirement preparedness is not advanced. However there is evidence that participants will respond if engaged.

Key Findings

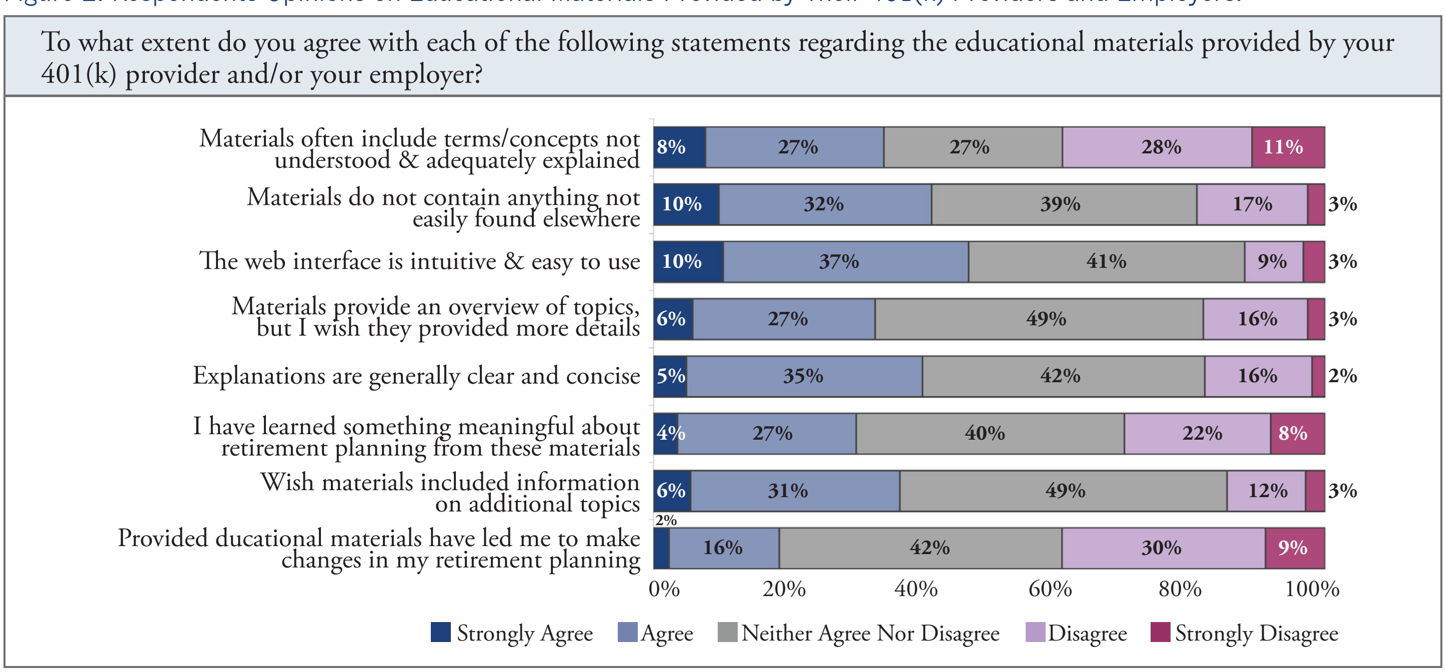
Only 30% of respondents agreed that they learned something meaningful from the educational materials provided by their 401(k) provider and/or employer (approximately the same percentage disagreed).

Less than 19% of respondents agreed that those materials led them to changes in their retirement planning (more than twice as many disagreed).

Opportunity

37% of respondents agreed that if they better understood how to plan for retirement, they would save more.

Figure 2: Respondents Opinions on Educational Materials Provided by Their 401(k) Providers and Employers.



Calculators and Modeling Tools

Respondents were asked similar questions regarding modeling tools and calculators provided by their 401(k) providers and employers (Figure 3). Respondents' views here were consistent with their views on educational materials–more work needs to be done.

- 29% of respondents do not understand the inputs
- 25% of respondents do not understand the results
- 47% of respondents agreed calculators in their 401k were not particularly unique (only 7% disagreed)

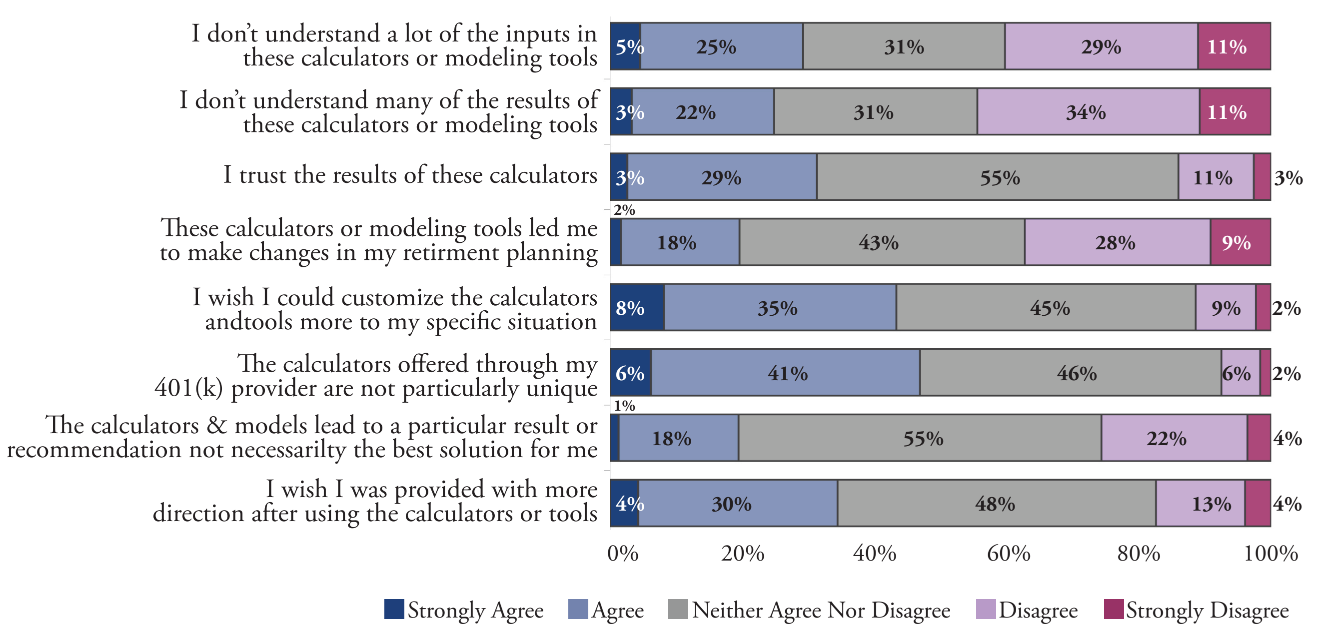
Similar to educational materials, retirement calculators and modeling tools have not prompted a large-scale change in savings behavior; about twice as many people disagreed (37.3%) than agreed (19.6%) that the tools available to them led them to make changes in their retirement planning.

Opportunity

35% of respondents expressed a desire for more direction after using calculators or modeling tools.

Figure 3: Opinions on Calculators and Modeling Tools Provided by 401(k) Providers and Employers.

To what extent do you agree with each of the following statements regarding the retirement calculators and modeling tools provided by your 401(k) provider and/or your employer?



Participant Education, Striking a Balance

As evidenced by the struggle of even the most highly educated participants to understand some of the more fundamental retirement planning concepts, it is essential to nail the basics. However, there is also strong demand for access to educational materials that go beyond the fundamentals and access to more sophisticated modeling tools. Indeed, given that participants are now faced with the task of essentially developing a personal pension plan, providing access to more complex services and resources is a must.

Respondents appear to recognize this need and expressed a desire for educational resources and tools that range from simple to complex. When asked to evaluate the importance of features in a hypothetical employer provided retirement planning solution, respondents viewed tools and educational materials at both ends of the spectrum nearly equally in importance (Table 2).

Table 2: Respondents' Views on the Importance of Features

Feature	% Considered Feature important
Access to simple tools to get you going	71 %
Access to complex modeling tools to enable customized planning	64 %
Access to educational materials that cover retirement planning basics	64 %
Access to more comprehensive educational materials that cover advanced investing and portfolio construction concepts	68 %

Importance of Employer-Based Education

Employer-sponsored savings plans such as 401(k)s are the cornerstone of most investors' retirement plans, therefore employers are the single most important source for retirement planning information. A recent LIMRA survey[2] found that 40% of pre-retirees said the most important source to help plan retirement was information provided by their employer (the second most cited primary source was the Internet at 14%). The same survey found that pre-retirees believe their employers to be as important a future source of retirement planning advice as stockbrokers.

While employers may not exactly welcome the responsibility, they should recognize that are viewed as a trusted source for information. Contrast this with the only 21% of respondents who agreed with the survey question "I think most of the educational resources on retirement planning available on the Internet are unbiased."

Though employers are conduits through which the education flows, they are generally not the developers of the educational resources. That job falls to 401(k) providers. The graph in Figure 1 suggests more work needs to be done. Others are more direct in their criticism:

"Let's face it, participant education has been an abject failure."[3]
Jerry Bramlett, CEO, BenefitStreet

In the aftermath of the market break of 2008, Congress has begun examining how it might revamp the 401(k). While employers might welcome the government either taking this responsibility off their plates entirely or providing a single blueprint to follow, government control or well-intentioned mandates may not be in the best interests of investors and will most certainly be a net negative for 401(k) providers. 401(k) providers need to get out in front of this risk by seriously addressing the issues of education and guaranteed income.

In Their Own Words

Respondents were Asked...

"If someone were going to develop financial products and services for the sole purpose of meeting your wants and needs, what would you want included in each?"

A sampling of their repsonses:

"Guaranteed low risk income without worrying about economic problems."

"Highly customizable planning tools."

"Honest information. My biggest concern is trusting that products are in my best interest and not the interest of those selling them to me."

"Tell me what number I need to invest each month to get a **fair standard of living in retirement."**

"Ability to look at all investments in one window."

"I would like to better understand products that would provide **additional savings besides my 401(k) since I do not have a pension plan."**

"Clear explanations of product features; clear explanations of costs and returns."

"Create multiple modeling profiles easily andwork on several what-if scenarios **at the same time."**

"Financial products that give me the ability to diversify my money and **a simple way to track it all."**

"Ability to model future returns using **meaningful projections of economic activity and volatility**, rather than requiring me–with no particular knowledge–to choose constant inflation factors, et cetera, out of thin air."

"Most financial institutions forget they are talking to people who are not in the financial business. I have a college degree and I have NO idea what you are talking about... **You people scare the daylights out of me."**

Investors: Disconnects & Contradictions

There were interesting disconnects and contradictions in the way many respondents answered related questions. These "disharmonies" fall into two general areas:

1. Respondents view of their retirement preparedness versus the retirement planning actions and behaviors they have undertaken and exhibited–expectations versus the likely reality.
2. Respondents concurrent expression of confidence and concern about their standard of living in retirement.

Retirement Preparedness: Expectations vs. Likely Reality

Not too surprisingly, respondents tended to overestimate their retirement preparedness relative to their actions. Figures 4 & 5 illustrate respondents' answers to questions regarding their actions with respect to retirement planning and their confidence in their ability to meet their standard of living in retirement.

Figure 6 illustrates a more direct disconnect among respondents. It depicts those respondents that have confidence in their ability to generate income from their assets once they retired, though they indicated they had formulated no plan for doing so. The two questions in Figure 6 were asked in succession.

Key Finding

Respondents working with a financial adviser were less likely to have unrealistic expectations for retirement than those without financial advisers.

Figure 4: Portfolio Familiarity & Retirement Confidence

Respondents who have **never** conducted reviews of their portfolios, yet **confident** they will meet desired standard of living in retirement.

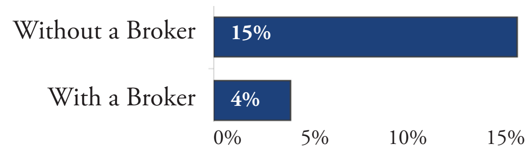


Figure 5: Income Planning & Retirement Confidence

Respondents who **have not** reviewed how much income they need to generate in retirement to reach goals, yet **confident** they will meet desired standard of living in retirement.

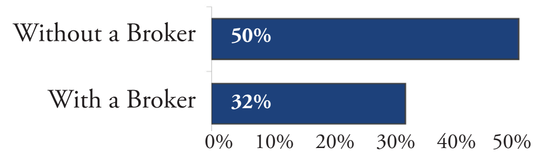
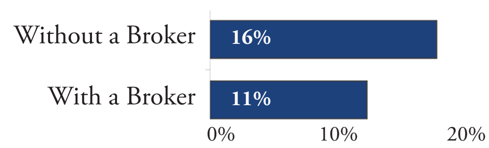


Figure 6:
Income Planning & Confidence in Ability to Generate Income

Respondents who **did not agree** with the statement: "I have a plan for generating income from my assets once I retire," but **did agree** with the statement: "I have confidence in my ability to generate income from assets once I retire."



A Final Illustration of Respondents' Dissonance

Two Questions in Succession:

1. What percent of your current salary will be necessary to maintain your current standard of living in retirement?"
2. What percent of our current salary do you estimate you will actually be able to replace in retirement?

51% of respondents either did not know how much of their current salary they would be able to replace in retirement, or indicated the amount that they could replace was less than the amount required to maintain their current standard of living. Of this group 47% were still confident they could maintain their current standard of living in retirement.

Clearly, there are significant differences in respondents' views in how they see their retirement versus what they will likely experience based on their actions to date. Investors' tendencies to express greater self-confidence than what is warranted based on their abilities or behaviors illustrates one of the hazards in relying too heavily on investor self-evaluations, or simple questionnaires. Other surveys have come to a similar conclusion.

A November 2008 survey of advisers by Brinker Capital, the "Brinker Capital Retirement Indicator" found that 75% of advisers "said they noted a stark difference between clients' responses on their risk tolerance questionnaires and the actual risk they were willing to take."

What Lies Beneath Investor Confidence?

While respondents expressed high levels of confidence (as misplaced as that confidence might be) in a rosy retirement they also, paradoxically, expressed some serious concerns about their futures, particularly as it relates to the ability to generate sufficient retirement income. Figure 7 illustrates respondents' level of concern regarding four income-related retirement risks.

Figure 7: Concern Regarding Specific Retirement Risks

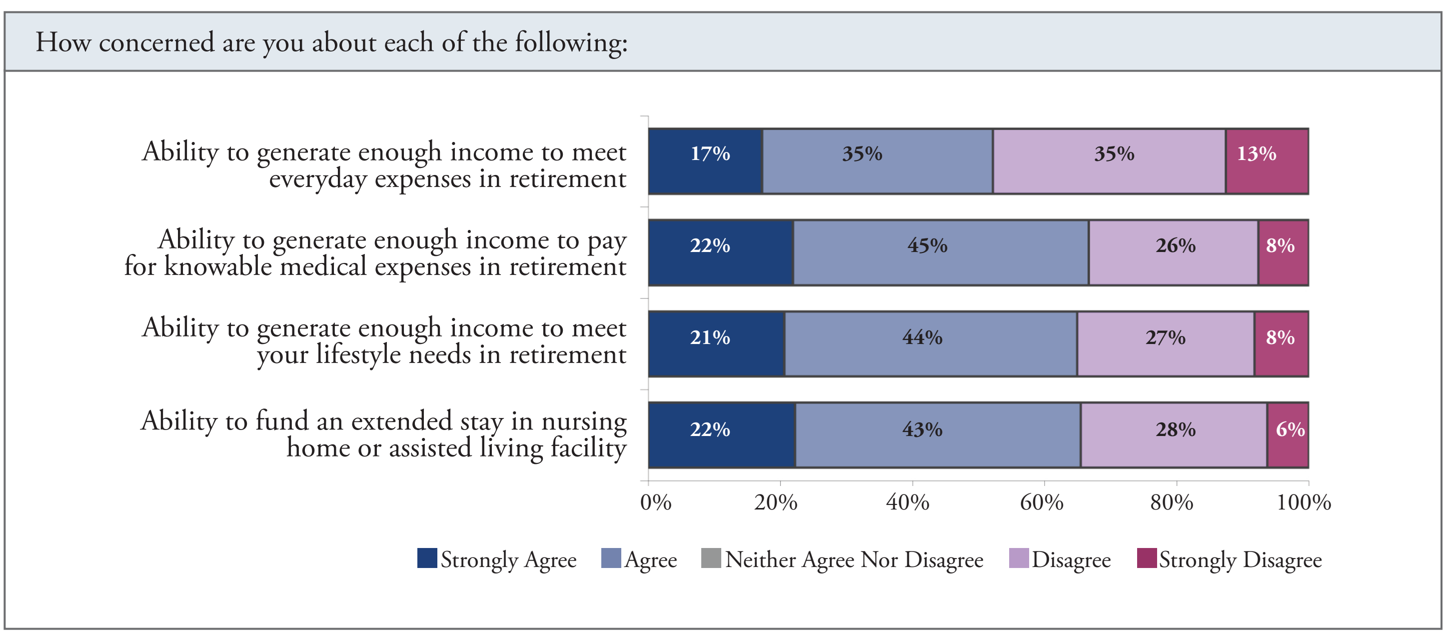


Figure 8 illustrates that 40% of respondents expressed concern about all four retirement income-related risks and that 81% expressed concern about at least one.

Figure 9 illustrates the results of question on retirement confidence. 68% of respondents expressed confidence in their ability to meet their overall standard of living in retirement, though 71% expressed concern about at least two of the four retirement risks listed in the *immediately preceding* question.

Figure 8: Extent of Retirement Concerns

Number of Figure 7 risks by percentage of respondents.

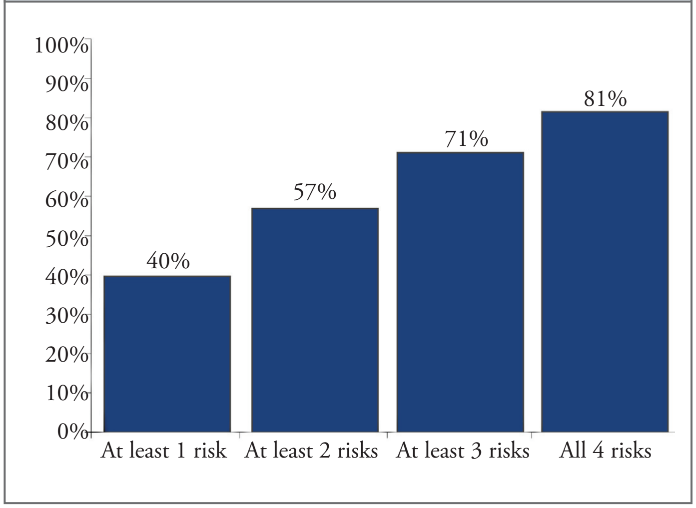
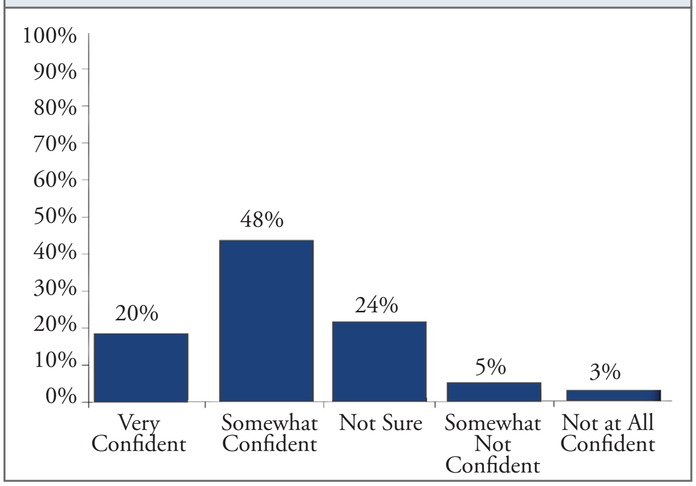


Figure 9: Overall Retirement Confidence

How confident are you that you will be able to meet your overall desired standard of living in retirement?



What Causes these Disconnects?

Disconnects similar to the ones we have cited do not make for effective retirement planning or a fulfilling retirement. Why do they exist?

- Is it fear? Are investors willing to admit they have concerns (perhaps several), but cannot bring themselves to admit they are ill-prepared for retirement?
- Is it overconfidence (or ignorance)? Do people really believe they can meet their overall standard of living in retirement, though they have never considered how much income they will need or even done a thorough review of their portfolios?

Understanding the sources of this dissonance is essential in helping investors recognize and resolve it. Since this resolution requires an often meaningful change in behavior–adopting healthier investing practices and, likely, reducing consumption–an appreciation for the reasons behind the disconnects is essential in overcoming them.

The Role of Advisers

Investors that have advisers are generally doing a better job preparing for retirement than those that do not. This superior preparation is evident on three fronts; 1) investment performance, 2) positive investment behaviors, and 3) mental preparation as defined by more reasonable expectations and greater confidence.

Better Investment Performance

This survey did not ask respondents to self-report performance; however, there are more objective data available. Watson Wyatt Worldwide examined plan Form 5500 reports for the periods 1995 to 2005 and 2003 to 2006. Their study compared the investment performance of professional pension money managers and plan participants who managed their own accounts. They found that "professionals outperformed the 401(k) 'do-it-yourselfers' by an average of about 1 percentage point each year between 1995 and 2006, and by about 1.6 percentage points each year during the 2003-2006 bull market."[4]

More Disciplined Investment Practices

Table 3 illustrates that respondents to our survey that worked with advisers demonstrated more positive investment behaviors–namely saving more–than those that did not.

Table 3: Key 401(k) Metrics of Respondents Working with Advisers vs. Those Working Without Advisers.

	With Adviser	Without Adviser
Average 401(k) balance	209,317	101,000
Median 401(k) balance	65,000	45,000
% with 401(k) balance greater than $100,000	40%	27%
% saving 11% or more of salary	54%	42%

Better Mental Preparation for Retirement

Respondents that worked with advisers were more confident in their future. 73% were confident in their ability to meet their overall standard of living in retirement versus 65% for those not working with advisers. This is consistent with research done by Thrivent Financial for Lutherans. Thrivent surveyed 947 boomers in October 2008. 70% of participants who worked with advisers expressed optimism about their long-term financial health, versus 55% who went it alone.[5]

More important than confidence is evidence that the confidence is well placed. Respondents that had advisers were more likely to have expectations more reasonably aligned with likely retirement realities. Figures 4, 5, and 6 illustrate some of the disconnects respondents exhibited between their behaviors and the confidence and expectations. Respondents that worked with investment advisers had 31% to 73% lower "disconnect rate" than those without advisers.

Key Finding

30% of respondents indicated they would be more likely to contribute to their 401(k) plan if they could have a financial adviser of their choosing help them evaluate their options.

Why Are Not More Investors Working with Advisers?

Only 37% of our respondents reported to be working with a financial adviser. If a better outcome is more likely with an adviser, why don't more investors work with advisers? The answers from our respondents fall into 3 categories: 1) lack of confidence, 2) procrastination, 3) overconfidence.

Nearly a quarter of respondents (24%) were not working with an adviser because of "self-confidence issues". They indicated they either lacked confidence in their ability to evaluate a financial adviser to determine if he/she is knowledgeable or trustworthy, or they do not think an adviser would be interesting in working with them because their portfolios are not large. Nearly a fifth of respondents (19%) are confident in their ability to select an adviser, agreed they need one, but "haven't gotten around to it yet."

Of interest is the 43% of respondents who said they did not need a financial adviser. Of this group, 46% either do not think they can replace the income they need to maintain their standard of living in retirement or they could not estimate how much income they might need.

The good news for advisers is that for the nearly two-thirds of respondents without advisers, almost 45% expressed a desire to work with one–once the issue of trust and the force of inertia are overcome.

Better education should also bring additional opportunities for advisers to reach new clients as nearly half of those who currently do not feel they need an adviser may realize that perhaps they do.

Appendix B provides additional comparisons of respondents with advisers versus those without, as well as views on broker compensation.

The Role of Annuities: Today & Tomorrow

Product Familiarity and Usage

Opportunities to leverage mortality credits using a life-contingent payout are currently available primarily from traditional immediate and deferred annuities. Respondents were generally not familiar with these products. Figure 10 illustrates the respondents' level of familiarity with a dozen security and product types. The percentage of respondents who indicated they were familiar ("very" or "somewhat" familiar) with the three annuity products (immediate, deferred variable, and deferred fixed), was 23%, 27%, and 31%, respectively.

While one would expect a lower degree of familiarity with annuity products than securities such as stocks (77%) or mutual funds (79%), it is somewhat surprising that respondents' familiarity with annuity products was significantly lower than other more complex products including options/derivatives, 41%; commodities, 44%; universal life insurance, 58% and long-term care insurance, 61%.

Given the low level of familiarity, it is not surprising that annuities were not widely held by our respondents. 7.7% of respondents held deferred VAs while 6.2% reported holding deferred FAs, less than even the 11% that reported holding options/derivatives directly. (Fig.11). Only 1.2% held immediate annuities, though this result is less surprising as the survey was targeted to pre-retirees.

Opportunity

Though annuity product penetration is low, 61% of the respondents that did not own an annuity product did have a relationship with a life insurance company. Term life insurance was the most widely owned product accounting for 83% of the relationships among non-annuity owners.

Good News for Insurers

The good news for those issuing annuity products is that despite generally unfavorable coverage in the popular press, negative attitudes about annuities are low – from 12% to immediate annuities to 17% for VAs, (Figure 12). Though the neutral/no opinion sentiment was the most prevalent regarding annuity products (about ¾ of respondents), negative opinions were less often expressed regarding annuities than for other products with similar or higher ownership rates among respondents. Universal life, commodities, and options/derivatives had received negative ratings from 20%, 22%, and 22%, respectively.

Figure 10: Product and Security Familiarity

How familiar are you with the following securities or products?

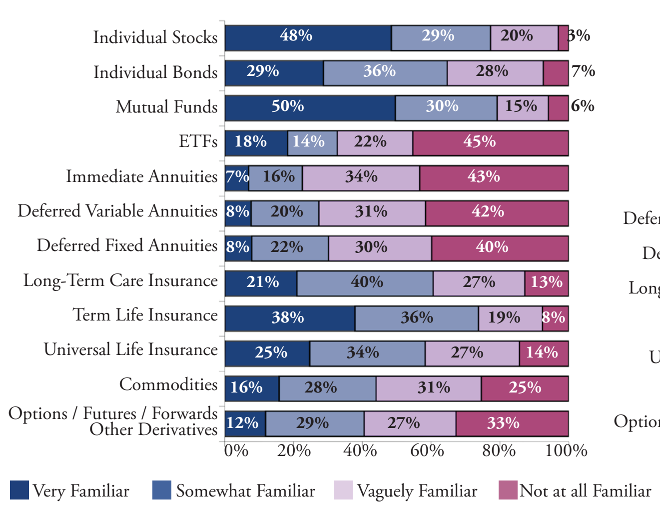
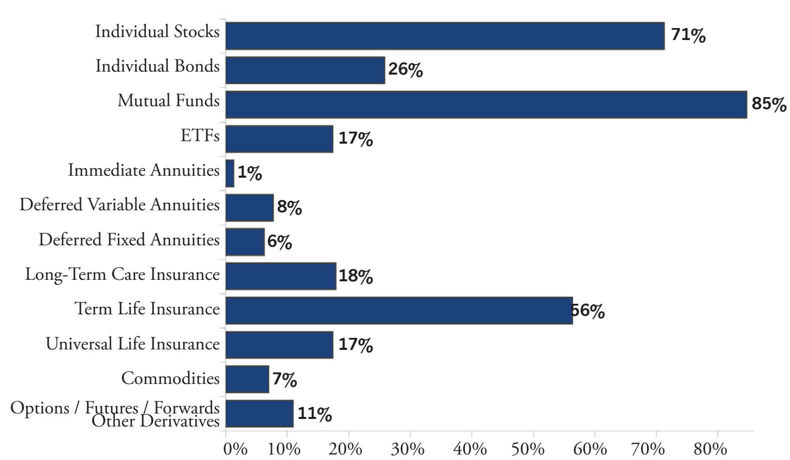


Figure 11: Product and Security Ownership

I own the following: (check all that apply)



While there is certainly a role for annuity products, many would argue that the deferred annuities that are purchased, particularly VAs, are not being used effectively by owners and their advisers. This may be due in large part to the industry's failure to communicate and educate on the value of mortality credits and its shift in product development toward withdrawal-based guarantees.

Conventional Wisdom on Life-Contingent Payouts

A frequently cited statistic is that less than 1% of deferred variable and fixed annuities are actually annuitized.[6] In defined contribution plans that offer both lump-sum and annuity payments, participants overwhelming select lump-sum payments. The fear of giving up control over assets and "dyers remorse" (annuity payments cease when the annuitant does) have been cited as two of the more significant objections to annuitization.

Most insurers have responded by focusing their product development efforts on riders that address these two sources of resistance; specifically Guaranteed Minimum Withdrawal Benefits (GMWBs). Though GMWBs have been morphing into ever more exotic forms to provide additional upside to contract owners (similar to the arms race involving GMDBs of the late 1990s), the absence of mortality credits means owners will receive much less income than guarantees offered on life-contingent payments; i.e. GMIBs. (See GMWB vs. GMIB income illustration in Appendix C.)

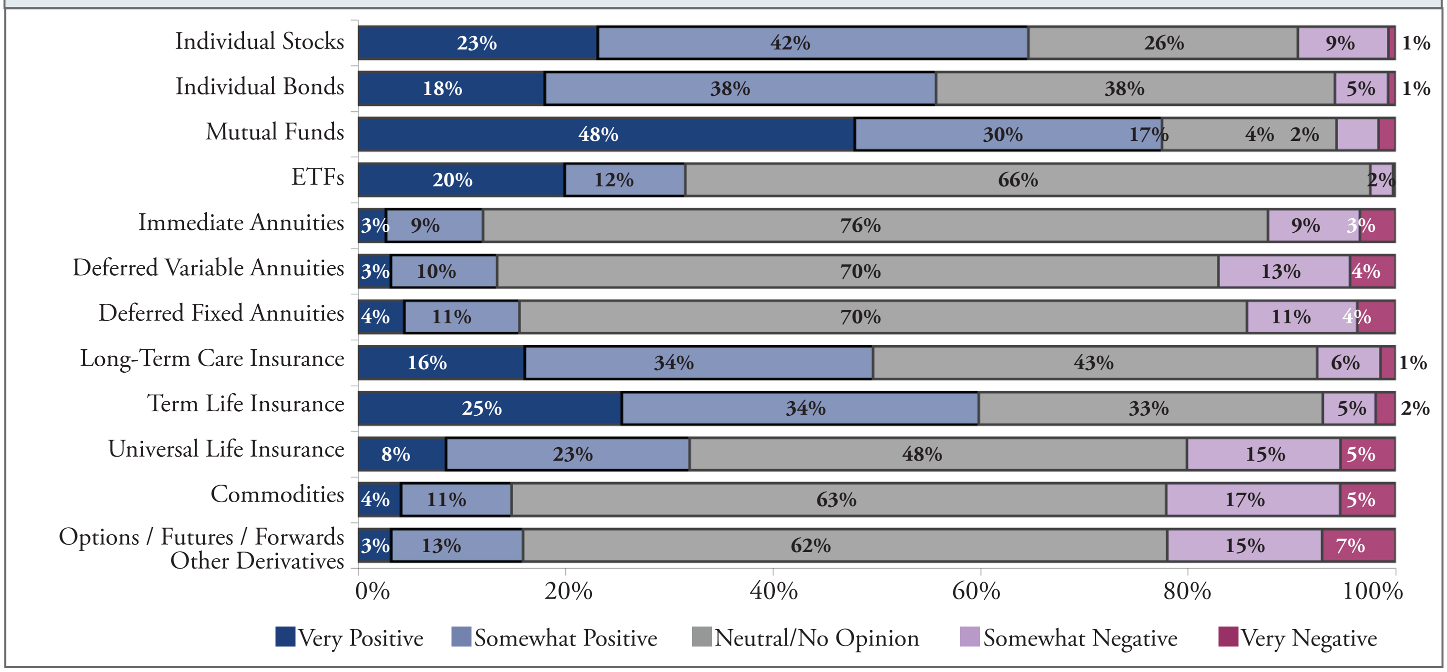
Of course, these insurers would contend that any guaranteed lifetime income is positive (true) and that their focus on withdrawal-based as opposed annuitization-based benefits is in response to market demand. But what if they are misreading the investors' appetite for life-contingent products? Perhaps it is simply an issue of framing.

Respondents Expressed a Willingness to Consider Mortality Contingent Products

We asked respondents three questions related to their interest in life-contingent income. The questions were not asked directly – i.e. "Would you buy an immediate annuity?" but indirectly to try and get a sense of investors' views of concepts in the absence of any preconceived notions of a product.

Figure 12: Opinions on Securities and Products

Please give your overall opinion on each of the securities or products as investment options for individual investors.



Willingness to Annuitize

Investors can get past the concept of "you get nothing when you die" and expressed the notion of interest in life-contingent annuitization. Figure 13 illustrates that 30% of respondents would "definitely" or "likely" annuitize a portion of their portfolio, while an additional 40% were open to the possibility. Only 10% indicated they would "definitely not".

Willingness to Make a Long-Term Commitment to Longevity Risk Mitigation

Respondents showed a surprising willingness to commit to an advanced life delayed annuity (ALDA)type of product that would require a 40 year waiting period for an uncertain return. Nearly a quarter (23%) said they would "definitely" or "likely" purchase such a product and another 26% indicated they would "possibly" purchase the product. Only 17% dismissed the idea out of hand. (Figure 14)

Willingness to Pay for Guaranteed Income

Finally, respondents expressed a willingness to pay for guaranteed lifetime income. 40% would "definitely" or "likely" pay for a product that provided such a benefit and an additional 37% were willing to consider it. Only 7% were "definitely not" interested in such a product.

Figure 13: Willingness to Consider Annuitization

For a portion of your portfolio, would you be willing to trade the ability to leave the remainder of that asset to your heirs upon your death if doing so would allow you to generate a greater amount of lifetime income than you otherwise could?

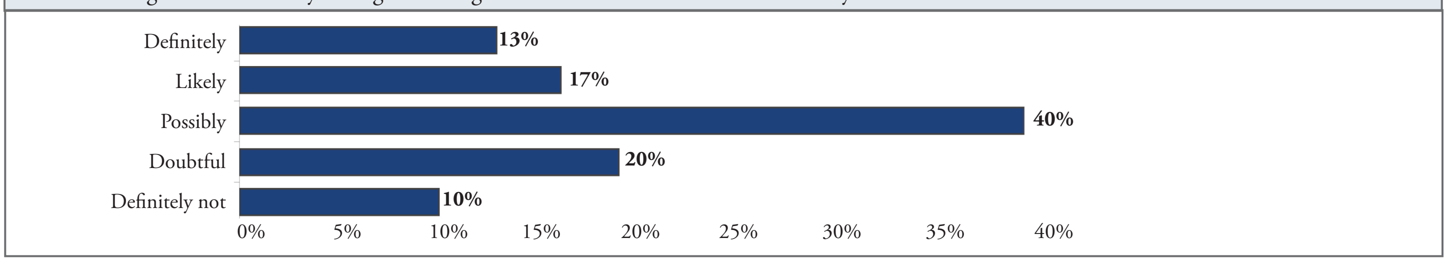


Figure 14: Willingness to Make a Long-Term Commitment to Longevity-Risk Mitigation

Would you be willing to pay $50 per month beginning at age 40 if doing so would allow you to receive $750 per month for as long as you live beginning at age 80? (Assume no inflation and that if you die prior to age 80 your heirs do not receive a benefit.)

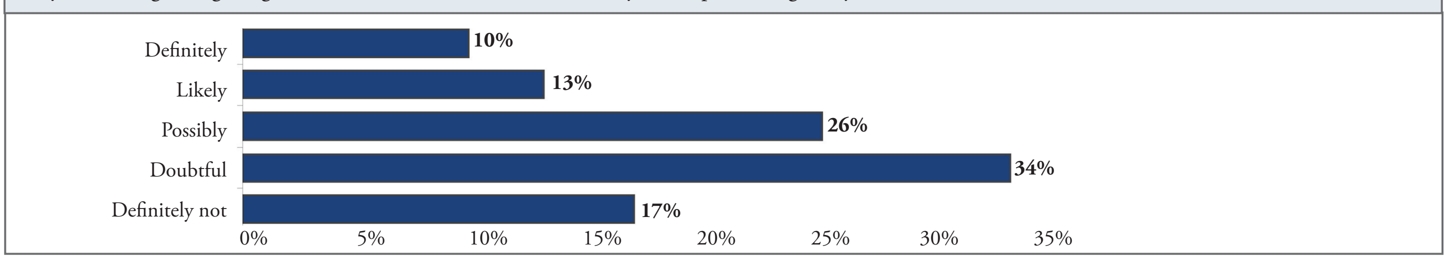
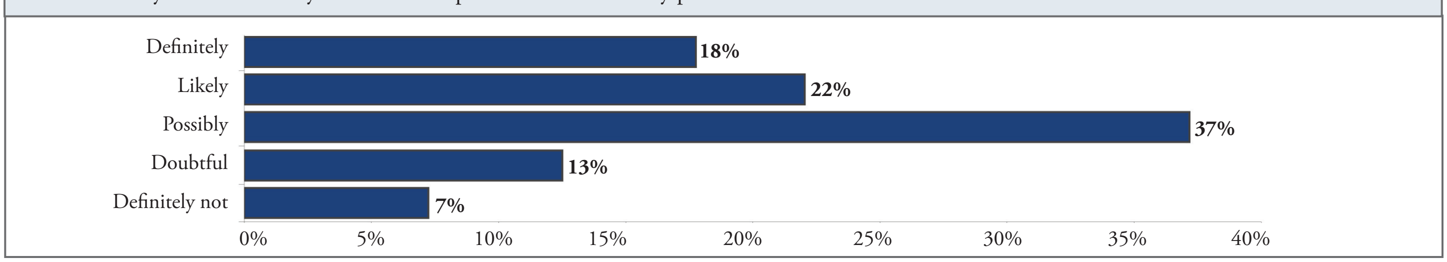


Figure 15: Willingness to Pay for Guaranteed Lifetime Income

Would you be interested in purchasing a product that provided a guarantee regarding your ability to generate lifetime income from your assets once you retire if the product was reasonably priced?



An Interesting Difference in Respondent Receptivity

The receptivity of all respondents to life-contingent payouts was higher than what conventional wisdom might suggest (perhaps it would have been higher still had the survey been conducted after the 2008 market break). One interesting difference–respondents that did *not* own deferred annuity products were *more* interested in the concept of annuitization and mortality credits.

Key Finding

When asked about their willingness to consider annuitization (see the question in Figure 13) 41% of respondents that did not own a deferred annuity product indicated they would "definitely" or would "likely" trade the bequest option for higher lifetime income. Only 22% of respondents that did own a variable or fixed annuity responded similarly.

It is somewhat surprising that respondents who owned annuities and (and presumably were educated on and understood the benefits) were nearly half as interested in a major advantage of the product than those who did not own them. Perhaps this is an indication that the industry needs to reevaluate its approach on educating investors and advisers on the benefits of life-contingent payouts.

Opportunities Abound

Americans' lack of preparedness for retirement is an enormous opportunity for insurers, asset managers, and advisers. What is unique about seizing this opportunity is the extraordinary chance to do tremendous good. In 2009, it is with no small amount of trepidation that one offer the word 'noble' with regard to the business of insurance and financial services companies. However, few for-profit enterprises outside of medicine can claim to have as profound an impact on the lives of others than those that help people achieve a secure and dignified retirement, and the opportunities for happiness that such freedom from financial worry allows.

To succeed, organizations will need to improve their skills at connecting with individuals, listening to and responding to their needs, and providing resources which give investors confidence to take action. This is particularly true for 401(k) providers who are the "first responders" to this crisis.

401(k) Providers

Because 401(k)s and other defined contribution plans are the cornerstones of retirement planning, 401(k) providers have much to gain. This is particularly true of 401(k) providers that are also asset managers, insurers, or perhaps both. While the opportunities are significant, they will not be fully realized without firms making a considerable investment in reaching out to participants. The survey results suggest three areas of particular need:

1. **Repairing the Disconnects.** We need to better understand the sources of disconnect between investors' retirement expectations and the less rosy realities that likely await them based on current behavior. By understanding the reasons behind the disconnect we can better effect a change in behavior.
2. **Education.** The challenge here is two-fold; developing the materials and tools for investors of varying degrees of sophistication, and making it easy to access the appropriate information so that the volume of content is not overwhelming. Developing and maintaining a retirement planning strategy is complex. Even if participants intend to outsource all they can to professionals, they need to have some understanding of the more complex topics so they can ask the right questions of those they are hiring to help them.
   - 37% of respondents agreed that if they better understood how to plan for retirement, they would save more.
3. **Advice**. Similar to education, there is a continuum of need here. Some participants may want an adviser of their choosing with them every step of the way. These folks will need an interface for their adviser to manage their 401(k) and a mechanism to provide appropriate compensation. While others may be more confident doing much of the heavy lifting themselves, many will still want some kind of customized modeling advice on which they feel comfortable making decisions.
   - 35% of the respondents expressed a desire for more direction after using calculators or modeling tools.
   - 30% of respondents indicated they would be more likely to contribute to their 401(k) plan if they could have a financial adviser of their choosing help them evaluate their options.

For 401(k) providers that are asset managers it may be worth exploring devoting additional resources to Rollover IRA efforts; 28% of respondents had 401(k)s from previous employers they had not rolled over to 401(k)s.

Insurers

While there are many, often interrelated contributing factors to America's collective unpreparedness for retirement, one trend can be singled out as the current on which they all ride: the demise of the defined-benefit plan.

Longevity risk is making the shift from a topic of academic research to an identified concern of investors. Insurers are uniquely equipped among financial institutions to help investors manage this risk. The industry's efforts have improved in recent years to becoming an increasingly important "spoke" in the wheel, but they have yet to become the "hub" at the center of investors' retirement planning strategy. There are indications the environment is such that life insurers can increase both mind and market share:

- **Investors need for income products:** Respondents are concerned about their ability to generate enough income in retirement (Figures 7 and 8).
- **Investors are aware of this need:** Investors are more willing to consider annuitization than conventional wisdom suggests when the concept is explained in terms investors understand. (Figure 13).
- **Investors are willing to adopt the new behaviors required by products that will address this need:** Respondents have indicated they are willing to make a long-term investment to ensure adequate income in advanced retirement (Figure 14).
- **Investors are willing to pay for the products:** Respondents have expressed an interest in and willingness to pay for guaranteed income (Figure 15).
- **Insurers may already know who most of the likely customers for these products and services are:** 61% of respondents that did not own an annuity product had a relationship with a life insurance company.

To assume their "rightful" place as the hub of America's retirement solution, insurers need to make a critical shift to becoming solution-oriented organizations as opposed to product-oriented business units. Insurers in the best position to offer a compelling solution will be those that are also leaders in the 401(k) and defined contribution marketplace.

Pressure on Benefits

Employees have traditionally looked to their employer to provide healthcare and retirement benefits. Employers will spend an average of $7,500 per employee on healthcare costs in 2009, up 30% since 2004 (versus a 42% increase for employees).[8] Though employers are paying more in healthcare costs per employee than ever before, the sharp rise in employee premiums and generally less rich benefits have reduced employees' perceived value of their healthcare plan. Given competitive pressures and healthcare's cost structure, employers have little choice but to continue shifting of a greater share of rising costs and responsibilities to employees. String Financial's product and service offerings extend the features and functionality of employers' existing defined contribution plans at minimal cost to the employer. This increases the actual and perceived value of an employers' overall benefits package.

About String Financial

String Financial: Unified Retirement Planning™

String Financial™ allows employers to provide their employees with a comprehensive retirement planning solution without assuming additional administrative complexity or fiduciary risk.

Our mission is to help participants identify their retirement goals and develop a strategy to realize them. Though the needs, objectives, and ultimate plan are unique to each participant, five tenets form the foundation of String's overarching approach:

1. **Simplicity**: Making portfolio management easier for participants by unifying retirement savings from disparate sources in a single dashboard
2. **Education:** Providing the resources and tools to participants of all experience levels so that they can take positive actions with confidence
3. **Innovation:** Developing innovative financial products to generate lifetime income and mitigate longevity risk
4. **Advice:** Providing access to advice from multiple sources including String's proprietary advice engine and our platform that allows participants to connect the advisers of their choosing
5. **Minimizing Costs:** Promoting low-cost investment options and efficiently designing products to minimize the drag of fees on performance

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Overview of String Financial's Services

StringAccounts™

StringAccounts™ simplify portfolio management by uniting 401(k)s, IRAs, other qualified and non-qualified accounts in a single view that allows easy drill-down to individual account and investment level detail on absolute and relative performance, risk metrics, and asset allocation.

- 62% of respondents had 3 or more retirement accounts
- 53% had retirement accounts with 3 or more different institutions

StringAdviser™

The StringAdviser™ service is designed for participants who recognize the most effective way to plan for retirement is develop a customized plan to meet their unique set of circumstances, and are ready to invest some time planning their future. The personalized investment plan is the result of an intensive 5-stage process completed at the participant's own pace. StringAdviser™ will develop a tax-efficient reallocation of the participant's portfolio across the mix of asset classes, investment options, investment vehicles, and products that will put the participant in the best position to achieve his or her retirement goals while staying within the participant's investment comfort zone.

- Respondents given a description of *StringAdviser™* and *StringAccount™* features were asked how much they would be willing to pay for the features as a single service offering. The average respondent was willing to pay an annual asset-based charge of more than 58 basis points.

BrokerConnect™

Many investors prefer individual advice provided by a financial professional they know and trust. However, it is generally cumbersome for financial advisers to get compensated on advice provided to clients inside of their 401(k) plans. BrokerConnect™ provides a platform for financial advisers to be compensated for advice on all accounts, including 401(k)s, on which they are listed as the broker of record. This provides participants access to the advice they need to make informed decisions regarding perhaps their largest retirement asset. Participants control an adviser's permission level (e.g. view only or trading authority) as well as the accounts an adviser is authorized to view.

BrokerConnect™ is more than a mechaism for facilitating broker compensation. It also helps advisers better manage their book by providing alerts on investments (e.g. a change in fund objectives) and client actions (e.g. a change in 401(k) contribution rate). Since clients do not always remember to tell their financial advisers when their circumstances or goals have changed, BrokerConnect™ ensures advisers are kept in the loop and facilitates communication between broker and client.

- 30% of respondents indicated they would be more likely to contribute to their 401(k) plan if they could have a financial adviser of their choosing help them evaluate their options.

StringSchool™ and StringSuite™

StringSchool™ is a series of modules designed to address educational needs of participants of all investment experience of levels. Topics will range from the basics (e.g. the power of compounding) to the advanced (e.g. using the Sortino ratio). StringSuite™ is a collection of web-based applications that will allow participants or their advisers to run simulations on different investment strategies.

- 37% of respondents agreed that if they better understood how to plan for retirement, they would save more.

Proprietary Financial Products

Longevity Protector™

Longevity Protector™ is based on the Advanced-Life Delayed Annuity (ALDA) idea first articulated by Moshe Milevsky[7] and is designed to provide a hedge against inflation and longevity risks. In an ALDA, a participant begins paying relatively small premiums at a young age (e.g. 30 – 50), and pays those premiums, adjusted for inflation, for decades. At an advanced age (e.g. 75 – 90) the participant begins receiving income for life, also adjusted for inflation. It can be thought of as the complement of term life insurance; term life pays the insured's beneficiary only when the insured dies, while an ALDA product like Longevity Protector™ pays the insured when the insured lives (and the longer one lives, the more it pays).

- 23% of respondents answered "definitely" or "likely" when asked: "Would you be willing to pay $50 per month beginning at age 40 if doing so would allow you to receive $750 per month for as long as you live beginning at age 80? (Assume no inflation and that if you die prior to age 80 your heirs do not receive a benefit.)" Only 17% dismissed the idea out of hand.

StringIncome™

StringIncome™ is a variable annuity (VA) that guarantees a 5% annual return on each dollar invested regardless of actual account performance, if the participant elects to annuitize the contract. Annuity payments (which can be inflation-indexed) can be fixed, variable or a combination to provide maximum flexibility to meet retirement income needs. StringIncome™ is different from GMIB products currently on the market in that the mortality assumptions used to determine the annuity payment are based on competitive actuarial assumptions at annuitization as opposed to conservative "guaranteed factors" that reduce effective rollup factors by up to 50%. StringIncome™ was designed with risk management concerns front and center. This efficient product design and significantly lower distribution costs allow us to provide a benefit of greater value to the participant at a lower price point.

- 40% of respondents indicated they would "definitely" or "likely" pay for a product that provided a guarantee regarding their ability to generate lifetime income from your assets once they retired if the product was reasonably priced.

If you would like more information on String Financial's solutions, we invite you to visit our web site at

www.stringfinancial.com

There you can view demos on StringAccounts,™ StringAdviser™ and BrokerConnect,™ as well as the Sponsor Dashboard, an analytical tool for plan sponsors. You can also email us at

info@stringfinancial.com

Appendix A: Select Respondent Profile Data

Table A–1
Marital Status

Married, Spouse Works	49%
Married, Spouse Does Not Work	18%
Single/Divorced	32%
Widowed	1%
Total	100%

Table A–2
Salary (Respondents Only)

Less than $25k per year	2%
Between $25k and $50k per year	17%
Between $50k and $75k per year	18%
Between $75k and $100k per year	14%
Between $100k and $150k per year	23%
Greater than $150k per year	27%
Total	100%

Table A–3
Household Income (Respondents with Working Spouses)

Less than $50k per year	2%
Between $50k and $75k per year	6%
Between $75k and $100k per year	15%
Between $100k and $150k per year	23%
Between $150k and $200k per year	15%
Between $200k and $250k per year	16%
Greater than $250k per year	23%
Total	100%

Table A–4
Percent of Income Saving for Retirement

	Married	Single
Not currently saving	3%	10%
3% or less	14%	13%
4% to 7%	14%	13%
8% to 10%	19%	22%
11% to 14%	16%	17%
15% to 19%	15%	10%
20%+	20%	15%
Total	100%	100%

Table A–5
Ownership of retirement savings vehicles in addition to personal 401(k)

Spouse's 401k	3%
IRAs	14%
Other qualified savings	14%
Non-qualified savings	19%
401(k)s from previous employer not rolled over to IRAs	16%
None	15%
Total	100%

Table A–6
Current retirement savings

Less than $25k	20%
Between $25k and $50k	10%
Between $50k and $100k	12%
Between $100k and $200k	18%
Between $200k and $500k	23%
Between $500k and $1 million	10%
Greater than $1 million	7%
Total	100%

Table A–7
Pension Expectations

Either respondent or spouse	33%
Both respondent and spouse	9%
No pension expectation	59%
Total	100%

Table A–8
Post-Retirement Work Expectations

Likely start his or her own business	22%
Likely work full-time for someone else	5%
Likely work part time for someone else	26%
Do not intend to work	18%
Unsure	28%
Total	100%

Table A–9
Comparison of Married Vs. Single

	Married	Single
Average age	41	35.8
Median 401(k) balance	$65,000	$25,000
% of respondents with annual salaries of $100k+	71%	43%
% of respondents that have saved less than $25k	13%	28%
% respondents that have saved between $100k and $300k	32%	18%
% of respondents that have saved greater than $300k	35%	31%
20%+	20%	15%
Total	100%	100%

Appendix B: Comparison of Respondents Working With and Without an Adviser

Table B–1 Comparison of Respondents Working With or Without an Adviser Across Several Criteria

	Working With Adviser	Working Without Adviser
Percentage of respondents	37%	63%
Average age	41.7	38.5
Average estimated 401(k) balance	209,317	101,000
Median 401(k) balance	65,000	45,000
% with 401(k) balance greater than $100,000	40%	27%
4 year college degree*	88%	91%
Married	72%	65%
Saving 0% to 3%	15%	23%
Saving 11%+	54%	42%
Confident in ability to meet overall standard of living in retirement	73%	65%
Annual Salary Unmarried Respondents (32% of total)	**Working With Adviser**	**Working Without Adviser**
<$50,000	12%	23%
$75,000+	71%	58%
$100,000+	53%	47%
$150,000+	29%	25%
Annual Salary Married Respondents (68% of total)	**Working With Adviser**	**Working Without Adviser**
<$75,000	7%	9%
$100,000+	74%	79%
$150,000+	57%	53%
$250,000+	24%	23%

*Interesting finding: Respondents with a 4-year college degree or better were slightly less likely to work with a financial adviser.

Table B–2 Respondents Working with Advisors: Views on Adviser Compensation

Annual Compensation as % of Assets Under Management	% of Respondents
<1%	32%
1%	34%
Between 1% and 1.25%	16%
Between 1.25% and 1.50%	9%
Between 1.50% and 1.75%	3%
Between 1.75% and 2%	1%
2%	5%
More than 2%	0%

Appendix C: GMWB vs. GMIB

Situation

A 45 year-old man with $1,000 to invest each month until retirement at age 65.

Option 1:

A variable annuity that provides a 6% compound annual rollup in the benefit base for 20 years and 6% income for life (GMWB).

Option 2:

A variable annuity that provides a 5% compound annual rollup in the income base (GMIB).

At Age Sixty-Five

	GMWB	GMIB
Total investment	$240,000	$240,000
Benefit base	$455,646	$411,034
Pre-tax monthly Lifetime Income	$2,278	$2,970
After-tax monthly lifetime income	$2,970	$2,418

Result:

47% increase in lifetime income payment using GMIB product

Why is the GMIB payment significantly higher?

The mortality credits of single life annuitization result in a pre-tax GMIB monthly payment that is 30% greater than the payment available under the GMWB product even though GMWB product has a greater benefit base. There is also an important tax advantage in annuitization.

When a contract is annuitized, a portion of each annuity payment is considered return of principle and not subject to taxation. This exclusion ratio is based on the age at annuitization and applies to each annuity payment. When partial withdrawals are taken from an annuity product, 100% of the withdrawal is subject to tax at the ordinary rate until all of the income/gains have been extracted from the contract.

What would increase the advantage of the GMIB product over the GMWB product?

1. The older one is when one annuitizes the greater the advantage. If the 45 year old male was instead 55 and contributions were made for 20 years the GMWB numbers would be unchanged. The pre-tax monthly lifetime income payment under the GMIB product would be $3,949 (73% greater than the GMWB payment) and the after-tax payment would be $3,291 (101% greater). Most of the difference is attributable to the increased mortality credits one gets for annuitizing at an older age. About 5% of the benefit can be attributed to the fact that a higher exclusion ratio at the older age means a greater percentage of the annuity payment is tax-free.
2. Higher interest rates. Interest rates were based January 2009 interest rates – rates at historic lows.
3. Higher tax bracket. The tax shield is more advantageous at higher tax brackets.

Assumptions

- Monthly payments for GMIB product use single-life contingent annuity quotes from www.immediateannuites.com as of 1/13/2009
- No investment fees or rider fees reflected in GMWB or GMIB products
- 28% tax rate

Source: String Financial, LLC

Endnotes

1. The survey consisted of 50 questions and generally took participants about 15 minutes to complete. All questions were optional. The per question response rate ranged from a high of 429 to a low 291.

2. Bryck, Sally. 2006. "Retirement Planning: Is it Happening?" LIMRA International. A Survey of retirees and pre-retirees aged 55-70 with at least $50k in investable assets.

3. Laise, Eleanor. January 8, 2009. "Big Slide in 401(k)s Spurs Call for Change." The Wall Street Journal.

4. National Underwriter News Service. June 18, 2008. "Study: Pension Managers Beat DIYers."

5. National Underwriter News Service. November 10, 2008. "Survey: Boomers With Advisors Feel Better."

6. The "less than 1% figure has been cited in many articles. Research by LIMRA points to annuitization rates significantly lower than 1%. See the report: "Deferred Annuity Persistency" published by, LIMRA International and authored by Matthew Drinkwater, 2006. This report showed that 0.1% of variable annuity contracts and 0.2% of fixed annuity contracts annuitized between 2002 and 2004. Their sample size ranged from 19,263,899 contracts for the 2002 contract year to 27,725,554 for the 2004 contract year. he report also looked at variable and fixed annuities in employer-sponsored plans. 0.1% of contracts were annuitized each year. The number of contracts in the sample ranged from 1,769,252 in 2002 to 1,879,965 in 2004.

7. Milevsky, Moshe, Ph. D. 2004. "Real Longevity Insurance with a Deductible: Introduction to Advanced-Life Delayed Annuities."

8. Towers Perrin 2009 Heath Care Cost Survey, a survey of Fortune 1000 companies.