Fixed Annuities: Cognition & Decision-Making Biases

Decision-making biases often cause consumers to make less than optimal decisions. Here are common ones that affect annuity purchases.

Gambler's Fallacy/Hot Hands

These are opposite biases based on not understanding probabilities. Gambler's Fallacy is assuming that a pattern will be reversed simply because the opposite pattern is "due". It's betting that the roulette wheel will come up black on the next spin because the previous five spins were red. Hot Hands bias predicts that red will keep coming up because the ball is somehow predisposed to red numbers.

Although these biases have a greater influence on investment decisions, they also affect fixed annuity purchases. After the early stages of bull markets, consumers may believe that a bear market is due and move money to fixed annuities in anticipation. This is especially true if the market rally has been weak. However, the longer the bull market lasts, the more people feel it will continue to run. Today, hot hands help keep money in the stock market that may be intended for fixed annuities, but consumers are delaying the purchase and want to try one more spin of the wheel.

Projection Bias

Related to those biases is one based on believing what is happening will continue into the future. Indeed, some recent articles say that the new normal is a forever bull market with modest corrections along the way. In this environment, it becomes tougher to persuade people to move to an instrument that protects them from market risk of loss when they don't believe there is risk. Projection bias works best for annuities in the early stages of bear markets since the consumer feels that the bad times will continue and wants to protect what they have.

Innumeracy/Vividness

People that are bad at math tend to make more financial mistakes. The more vivid a number seems the more impact it has in influencing a decision. These are separate biases, but they often work together in creating bad decisions. There are ways to make the results better. Fractions confuse people, try not to use them. Percentages are easier to grasp, but whole numbers work better. In other words, instead of saying that 4/5s of retirees are happy that they bought an annuity, or even expressing it as "80%", say 4 out of 5 retirees are happy.

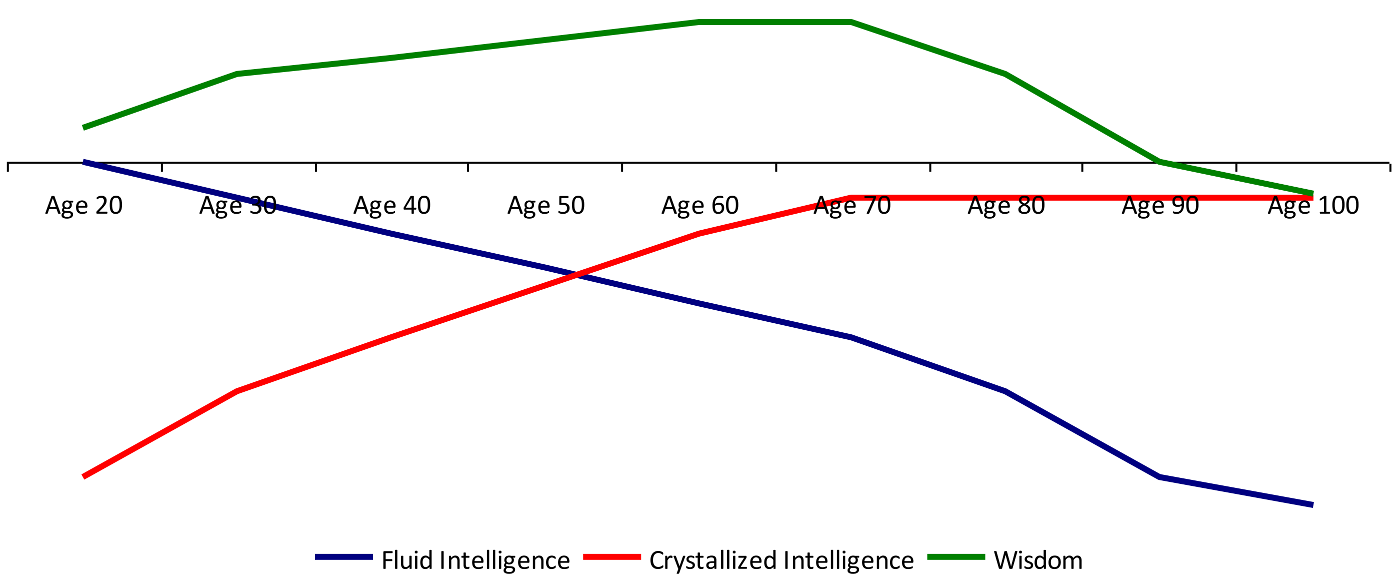
Larger numbers are more vivid. It's not that the annuity interest rate is 3%; it's that this annuity will pay you $3,000 on that $100,000. It's not that the guaranteed lifetime withdrawal benefit base grows at 6% a year, it's that at retirement you will receive $12,000 a year. Or, using the previous example, saying that millions of retirees are happy they bought an annuity makes a greater impact than four out of five are happy.

Risk Aversion

Risk aversion is not static; it varies based on the situation. The effects of stock market risk of loss are underestimated. Increasing vividness can make the risk more transparent. Telling a consumer that their $250,000 stock portfolio could be worth less than $200,000 in even a mild bear market has a greater impact than saying the portfolio could take a 20% hit.

Cognitive Changes in Seniors

As we age, the amount of total data we can hold in our head at any one time declines, the speed at which we process, compare and coordinate data slows, and our decision accuracy worsens. This mental processing ability – also called fluid intelligence or working memory – begins to drop starting in our late teens. The reason we are not completely befuddled by age 40 is that this drop is more than offset by the knowledge being obtained – also called crystallized intelligence. The result being that our financial decision-making powers increase until we near age 70 and sometimes beyond.



As the chart shows, at some point the drop in mental processing ability offsets the knowledge advantage and our decision-making powers begin to decline, but the decline is usually very, very gradual. The decisions of a 75-year-old are not any worse than that of a 35-year-old because the knowledge advantage of the septuagenarian trumps the faster brain processing of the tricenarian, but the 55 to 60-year-old version of both make incrementally better decisions.

This decline is not caused by dementia or cognitive impairment but is simply the result of aging. As you get older your eyes typically weaken, your hearing gets worse and your physical ability goes down – and the same thing happens to your brain. Just as you adapt to aging by wearing glasses, turning on the volume on the television, and giving up snowboarding, one can also make adjustments to improve decision-making.

Who Is A Senior? (cognitively speaking)
At what age someone becomes a “senior” is open to debate. AARP uses age 50 (although they seem to try very hard to never use the “s” word). Many state elder abuse laws use age 60 and state insurance regulations regarding special annuity suitability rules apply them beginning at age 65. However, from a cognitive perspective, the term “senior” is best applied to those over age 80.

Dementia refers to a state where the mental faculties have already declined to the point where fully rational decisions cannot be made. Cognitive Impairment means the process of reasoning is hampered. The financial professional should have procedures in place detailing what should be done when cognitive impairment is suspected.

A person with dementia cannot make an informed decision. A person with impairment may be able to make an informed decision. The following will help even the unimpaired make better decisions.

Take Your Time
When seniors are given more time to study and remember new data they perform as well as young adults. If seniors are not pressured and not rushed they tend to make decisions as well as anyone else.

Be Repetitious
Seniors may also have trouble learning new data, so it may take repeated exposure to get new data remembered. This requires ongoing questioning to determine if the new data is being processed.

Meet In The Morning
Seniors make their best decisions in the morning because that is when their mental faculties are best.

Give Enough Choices, But Not Too Many
This does not mean the senior should be denied the availability of selecting from amongst the 8000 mutual funds or 600 annuities, it means the financial professional needs to act as data-sorter to make the decision manageable.

No Insider-Speak
Every industry adopts its own shorthand. It’s quicker to say MVA rather than market-value adjustment, but an outsider won’t know what either of those terms mean. Talk to the senior using words and concepts they can relate to, and this often means using savings terms and explaining the differences.

Good Lighting & Good Contrasts
As we age our eyes have more difficulty seeing in low light and differentiating between subtle colors and shapes. What this means is use sharp contrasts on sales materials or on PowerPoint slides – not light blue contrasted with light green but dark blue with white; not violet but purple.

No Background Noise
A presentation will be better understood if it is conducted in a quiet room rather than a noisy restaurant, and the music in your office that you find soothing an older client may find distracting.

No Multitasking
Regardless of age, doing two or more tasks at the same time (multitasking) results in worse performance than doing each task separately, however, the consequences of multitasking are much worse for seniors.

The fixed annuity presentation should focus on the key elements – Safety: how can I lose and how much can I lose; Liquidity: how accessible is my money; and Returns: what is the worst and best I can do. Disclosure of these elements should be easy for the senior to read and understand.

Bear Markets & Human Behavior

The first quarter statements investors received made for a cold shower. The second quarter ones showed at least their domestic stock holdings were back up, but could there be more losses?

In one respect 2020 has been a good thing because the turmoil may have awakened those that have too much invested in stocks because they misjudged the risk of loss. An obvious alternative is a fixed annuity, but here we run into the same problem that occurs with every downturn with the investor wondering "but what if I pull out of the market and it goes back up". For those that have the time and tolerance riding out the loss is often the best course. However, for those clients that are short on time, or know in their gut they should step away from the market because they do not have the temperament, there are ways one can help them examine the merits of fixed annuities.

Bring a possible Future into the Present.
It goes like this: "I understand your portfolio was at $200,000 last quarter and is now worth $175,000, but how would you feel a year from now if it was at $150,000 because you didn't buy the annuity?"

Reframe the Picture
"Compared to when you began, your portfolio is still up $50,000. Let's preserve and add to that gain with a fixed annuity."

In both examples, the *psychological distance* is being decreased and brought into the present. The future seems a long way off, but it soon won't be, and, understanding this, does the client still accept the risk of loss? In the short-term, the value is lower, but looking at the long-term picture, the client has done well and now it is time to safeguard their gain.

Deal with the Guilt
Some investors are feeling guilt and regret because they didn't sell earlier. They can be helped by telling them it's not their fault: "Based on everything you knew at the time you did the right thing by not selling at the start of last fall. You were right then. Now is the time to be right again by moving to the fixed annuity."

A Small Part of the Big Picture

When talking about annuities there is a tendency to focus only on the surrender charge. The issue is this amplifies every concern a client might have because it feels like all of their money is in the annuity, since that's what is filling their thoughts at the moment. Remind them that they have other assets: "You still have $200,000 in investments and other savings in addition to the protection of the annuity".

Show A Pie Chart

It has been found that pie charts do a better job of connecting with most consumers and influencing their decisions than showing data on a spreadsheet. And consumers preferred pie charts with more equal slices of pie than fewer. What this means is to include annuities as a piece of the pie: "This chart shows you have too big a slice of investments and are missing annuities. Let's make the pie more appealing by adding annuities and making the slices more equal."

Pele Bad Luck, Annuity Good

For over twenty years the post office near Hawaii Volcanoes National Park has received a steady stream of, mostly anonymous, envelopes containing rocks. Or, more precisely, chunks of lava that people took from the park when visiting. While it is a crime to take rocks from a national park, it isn't fear of punishment from the Feds that causes the returns, but fear of Pele's revenge.

Pele is the Hawaiian goddess of volcanoes and there is a superstition that taking the lava rocks from Hawaii will enrage Pele and cause the souvenir collector bad luck. It appears quite a few people that have a run of bad luck after they return from the islands will read about Pele's curse and try to get rid of the bad luck by returning the robbed rocks.

The lesson from this tale is that the annuity industry is missing out on a marketing message. While it is true that fixed annuities have a number of benefits, they have never been presented as an effective talisman that wards off evil spirits. Although there may be doubters, consider the tangible proof of the annuity's powerful juju:

A fixed annuity protects you from the bad luck of outliving your money,

A fixed annuity protects you from the bad luck of being clawed by the next bear market,

A fixed annuity protects you from the bad luck of getting an ulcer due to stock market uncertainty,

And a fixed annuity protects you from the bad luck of having your spouse say "I told you so" if you didn't buy the fixed annuity and were forced to move in with your daughter's family.

Of course, we all know that this is superstitious nonsense – knock on wood – but If you don't buy a fixed annuity and you misplace your keys or it rains right after you wash your car, it might pay to remember this cautionary tale.

Behavioral Math

Decision-making biases act as a fog between new information and the brain often causing less than optimal decisions. These biases may be enlarged due to the problems many people have with understanding mathematics and statistics. Here are four common numbers-based biases and some suggestions on ways to clear the fog and help consumers make better decisions.

Absolute vs Relative

The headline will say something like" Scientists discover drinking coffee increases unicornitis fatalities by 50%". However, the story won't tell you that unicornitis only kills 4 people a year in the entire world and three of them drank coffee. 50% is an example of a relative number – its value is relative to other numbers; 4 is an absolute number – it can stand by itself. Relative numbers often distort reality.

Looking back a half-century, the average of all of the bear markets caused a drop of roughly 40% from the previous high. 40% is a high number by itself, but the impact may seem even greater in absolute terms. A 40% drop turns a $1.5 millionaire into a $900 thousand-mass affluent. When seen in absolute terms, the advantage of safeguarding market gains becomes more apparent.

Counting On Fingers

The typical adult often gets decimals confused and when it comes to fractions – forget it. The best shot at numeracy is achieved by using factors of 10, 100, and 1000.

The probability of running out of money early from your investments using a certain safe withdrawal rate may be 15%, but becomes more apparent when stated as "In a room of 1000 retirees 150 will run out of money before they die".

Flip The Numbers

The complimentary number may be mentally processed more effectively than the original number. The complementary number results from subtracting the original number from a base (usually 10 or 100).

An annuity may have an initial surrender charge of 8%. For one coming from investments restating this to say that the worst case is getting back 92% of their money may offer a clearer perspective.

Mental Accounting

If we hear there are six possible outcomes our instinct is to figure the odds of any outcome is 1 in 6. Although that is true when rolling a die, it is seldom true when it comes to financial odds. The problem is we tend to assume every outcome has similar probabilities even when that is not true.

A graph of past annual returns may show a fixed index annuity had a high of 16%, an average of 5% and a low of 0%. Without any other information, we probably won't assume that returns of 12% to 16% happened only 2% of the time and that 4% to 6% returns made up 70% of the past while 0% happened 18% of the time. Unless you're going to create a pie chart showing the breakdown of returns, it's better to minimize the graph results by concentrating on the average return and stating that zero happens.

6 Reasons Why You Should Use an Annuity Instead of Managing Assets

There has been much written on the effects of dementia on senior decision making, but dementia is only one factor (albeit a powerful one). The reality is as we get older it requires more effort to make good decisions because of our failing ability to rapidly process large amounts of data in our brains – a decline in our fluid intelligence. This does not mean that age in and of itself says a person cannot make good decisions, but it means that the focus and concentration required to do so may not be available due to issues of health or general stamina, even if the person is not cognitively impaired. Due to this inevitable decline, several studies have suggested that the use of annuities with life income benefits to generate retirement income makes sense because it eliminates the need for much of the future decision making regarding retirement assets.

Aggregating what has been written previously about the issue effectively creates a list of reasons to explain to a retiree why they should buy an annuity with a life income using at least a portion of their retirement assets.

1. Because You Don't Have a Pension

Unless the retiree worked for a government entity the odds are very strong the only predictable source of income they have is Social Security. Even if they worked for a company with a defined benefit plan they may have taken the cash instead of a pension. Unless the Social Security check is covering all of the retiree's essential costs there is merit in getting an annuity life income (especially a joint-life annuity for when Social Security income dips after the spouse dies).

2. Managed Asset Withdrawals are a Hope, Not a Guarantee

Wall Street uses retirement models to determine how much money can be withdrawn each year, but these are models, not reality, which is why the suggested "safe" withdrawal rate – safe meaning the odds are favorable that the money will last until the retiree dies – has varied from 2% to 5% since the turn of the millennium. If the model is wrong and the retiree runs out of money no financial advisor, target-date fund or asset manager will say "oops, I was wrong, but tell ya what, I'll continue to pay you out of my own pocket." It's not going to happen.

3. Diminished Physical Capabilities

Even if your mental faculties are as sharp as ever your physical parts may not be. As we age our hearing, eyesight and general stamina declines, which means you may not be able to read those IRA reports due to macular degeneration, and hearing loss may mean you mishear important news your financial advisor is sharing. Finally, an octogenarian or nonagenarian may simply not have the endurance to actively monitor investments on a regular basis.

4. Chronic Health Issues

As we age we are more likely to have ongoing health problems. The pills and therapies that treat the illness often leave the person still in pain, disoriented, and/or fatigued and thus less likely to devote time to managing their retirement assets.

5. Mental Impairment

The Plassman studies found that for seniors in their 70s 1 in 5 had some cognitive impairment and that figure rose to 1 in 2 for seniors in their 80s, and 3 in 4 for seniors in their 90s.

Cognitive impairment includes both those with dementia and those where thinking is only slightly impaired. If we tighten this to only include those with dementia – which includes Alzheimer's – the results are 1 in 20 for the 70s age group, 1 in 4 for the 80s and 1 in 3 for the 90s. The reality is a significant portion of the people that begin retirement actively managing their money will at some point be unable to competently do so, at least at times. Put bluntly, the reason for using an annuity is there is much less loss if the retiree succeeds in wiring their monthly annuity check to a Nigerian bank account than if they wired their entire IRA.

6. Guardianships & Powers of Attorney Have Limits

Something I faced years ago was my mother in the early stages of dementia which necessitated giving my brother power of attorney over her affairs, but due to her diminished capacity, it was questionable whether she had the legal capacity to sign the power of attorney. We had her sign anyway, found agreeable witnesses, and crossed our fingers it wouldn't be challenged. We were lucky, it never was. Still, it was a heavy burden that my brother assumed, even though our mother's assets were few. The guardian or agent has a fiduciary duty to do what is best for the retiree. However, even if they don't steal from the kitty or intentionally misuse their power what are their qualifications as an asset decumulation expert? Will they manage the assets to produce the maximum income prudent with reasonable risk? Will they try for riskier investments and lose the asset? Or will they put all the money into three month Treasury Bills to try to protect the principal, but generate too little a return so that the retiree still winds up impoverished in the future? There is also the choice of the guardian/agent. A 70-year-old man may name his 69-year-old wife as agent and become incapacitated at age 85, but by then the wife is 84 and experiencing her own problems. An acceptable agent now may be less than ideal when needed; even a well-intended guardian can make mistakes. Selecting an annuity with lifetime income before a guardian is needed helps prevent a future problem.

The Answer Is an Annuity with Guaranteed Life Income

The use or non-use of an annuity is not a financial choice, it is primarily a behavioral one. On the advisor side, a combination of two cognitive biases – overconfidence and hyper-optimism – work against recommending an annuity. In short, the advisor is confident that they can beat both the return expectations of the insurance company and the laws of probability in managing the retiree's assets. On the retiree side, the biases of risk aversion, availability, and mental accounting often get in the way of buying an immediate annuity, because the retiree feels they will die too early and get cheated. However, the use of a fixed index annuity with a lifetime withdrawal benefit overcomes most of the retiree's biases. To wrap up why an annuity with a guaranteed life income makes sense I'll quote three lines from Professor Frolik's conclusion, "The assumption that retirees can successfully manage their IRAs during their declining years is a folly... It is time to admit that what most retirees need is a stream of income. Our nation's retirees need and deserve the security of having a check arrive every month that does not depend upon their skill at managing an IRA during their declining years."

Sources: Frolik, Lawrence. 2014. Rethinking ERISA's Promise of Income Security in a World of 401(k) Plans. University of Pittsburgh School of Law. Working Paper 2014-26. http://ssrn.com/abstract=2470019

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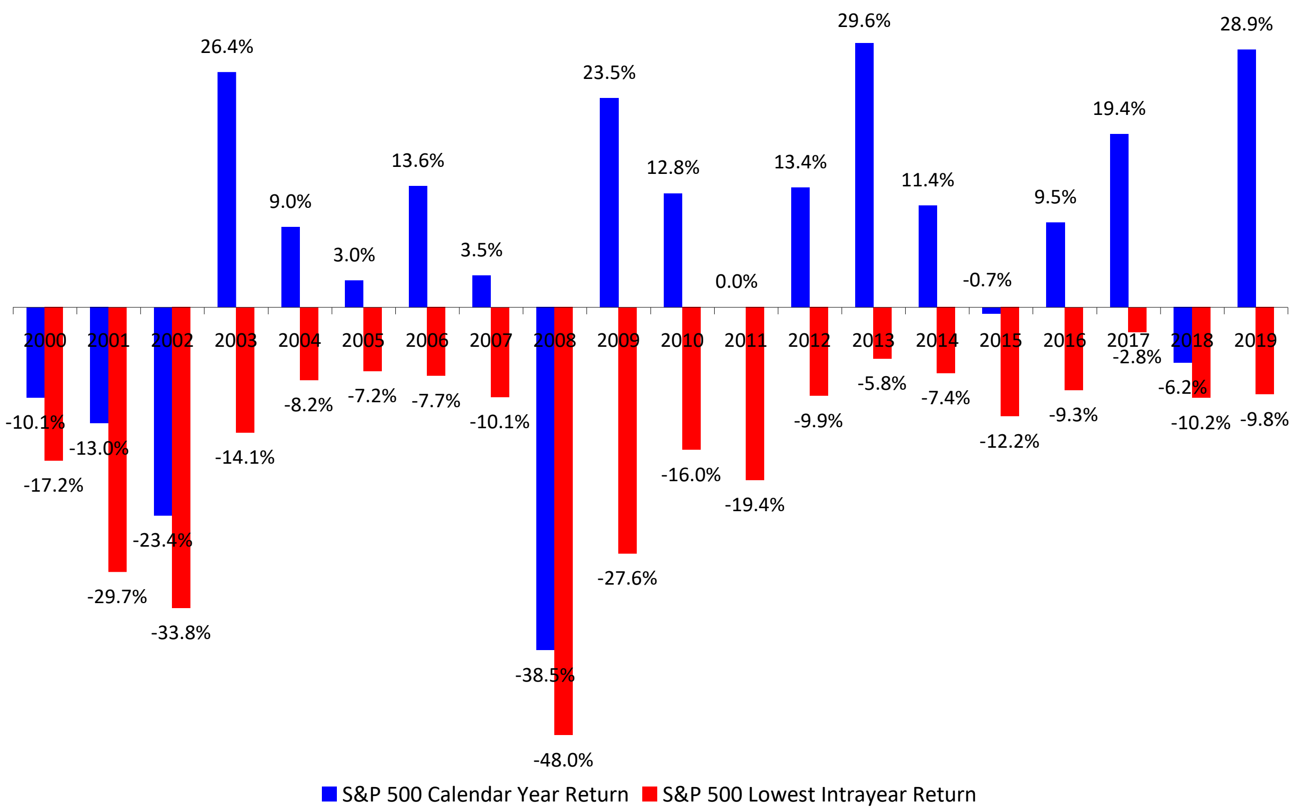
How Paper Losses Affect Your Brain (Annuity Scissors Cut Paper Losses)

History tells us that investing in equities produces higher returns over time. A problem is the market doesn't simply take off like a balloon and keep going up and up. Insteadthat balloon rises and falls, and rises and falls, and rises and falls again multiple times. This balloon ride wreaks havoc on our decision-making due to the way our brain interprets these dips.

In the previous decade for 32 twelve-month periods in a row the S&P 500 index ended with a loss. It didn't matter what month you'd entered the market, for almost three solid years the index finished any twelve months lower than when you began.

The usual issue is caused by *projection bias*, which means we take what is happening now and act as if it will always be that way in the future. Since the recent financial past often does not predict the near-term financial future this bias often leads to bad decisions. In addition, this reaction is multiplied by *loss aversion* which is a tendency to overreact to losses. These biases combine to often cause us to overreact to paper losses and the market consistently gives us just enough of a pattern to create an overreaction.



If you look back at calendar year performance of the S&P 500 since the Crash of '08, you see that, with the exception of a couple of essentially flat years, seven of the remaining years posted double-digit gains. If you stayed the course, you were amply rewarded. However, along the way every year presented a paradox where the market seemed to be returning to the Crash. Even in years such as 2012 and 2014 that ultimately saw the index up over 10% had at least a month where the index headed sharply down and that down period often resulted in premature decisions to sell out.

In 2014 the S&P 500 finished up 11.4% and yet in seven out of those twelve months investors were net sellers of equity mutual finds – *Investment Company Institute Long Term Mutual Fund Flows*

Annuities And Your Brain

Fixed index annuities offer a way to earn equity-indexed linked returns, but their designs largely avoid triggering the bad decision biases. In a fixed index annuity the owner cannot incur a market-based loss regardless of how far the index has fallen.

Annuity Scissors Cut Paper Losses

When the market trends down week after week, it may be the start of the next bear market, but the more likely result is a pause before the market heads up again. Unfortunately, our decision-making biases can't tell the difference. Using fixed index annuities helps us avoid making a bad decision on the latter, while protecting us from the worse losses of the former.

Advantage Compendium Ltd. (www.advantagecompendium.com)

is led by Jack Marrion, providing research and consulting services to financial firms in a variety of areas. He has conducted a broad scope of research ranging from the behavioral economic reasons why consumers buy or don't buy financial products to future industry impact models. He also served as Director of Research for the National Association for Fixed Annuities and as a Research Fellow for Webster University.

His insights on the annuity and retirement income world have appeared in hundreds of publications including *Best's Review*, *Business Week, Kiplinger, The New York Times*, and *The Wall Street Journal*. He has thrice been asked to address the National Association of Insurance Commissioners, most recently about the evaluating volatility control indices and previously on the effects of aging on senior decision-making. *Best's Review* said he was likely to affect the course of the industry. *Best's Review* said he was likely to affect the course of the industry.

Prior to forming Advantage Compendium Dr. Marrion was president and owner of an NASD broker/dealer with offices in nine states, and formerly vice president of a life insurance company and previously vice president of an NYSE investment banking firm. He has a BBA from the University of Iowa, an MBA from the University of Missouri and his doctorate from Webster University in the area of cognitive bias in decision-making formed a new paradigm in the marketing and development of retirement income products. Neither Jack Marrion nor Advantage Compendium sell or endorse any financial product.