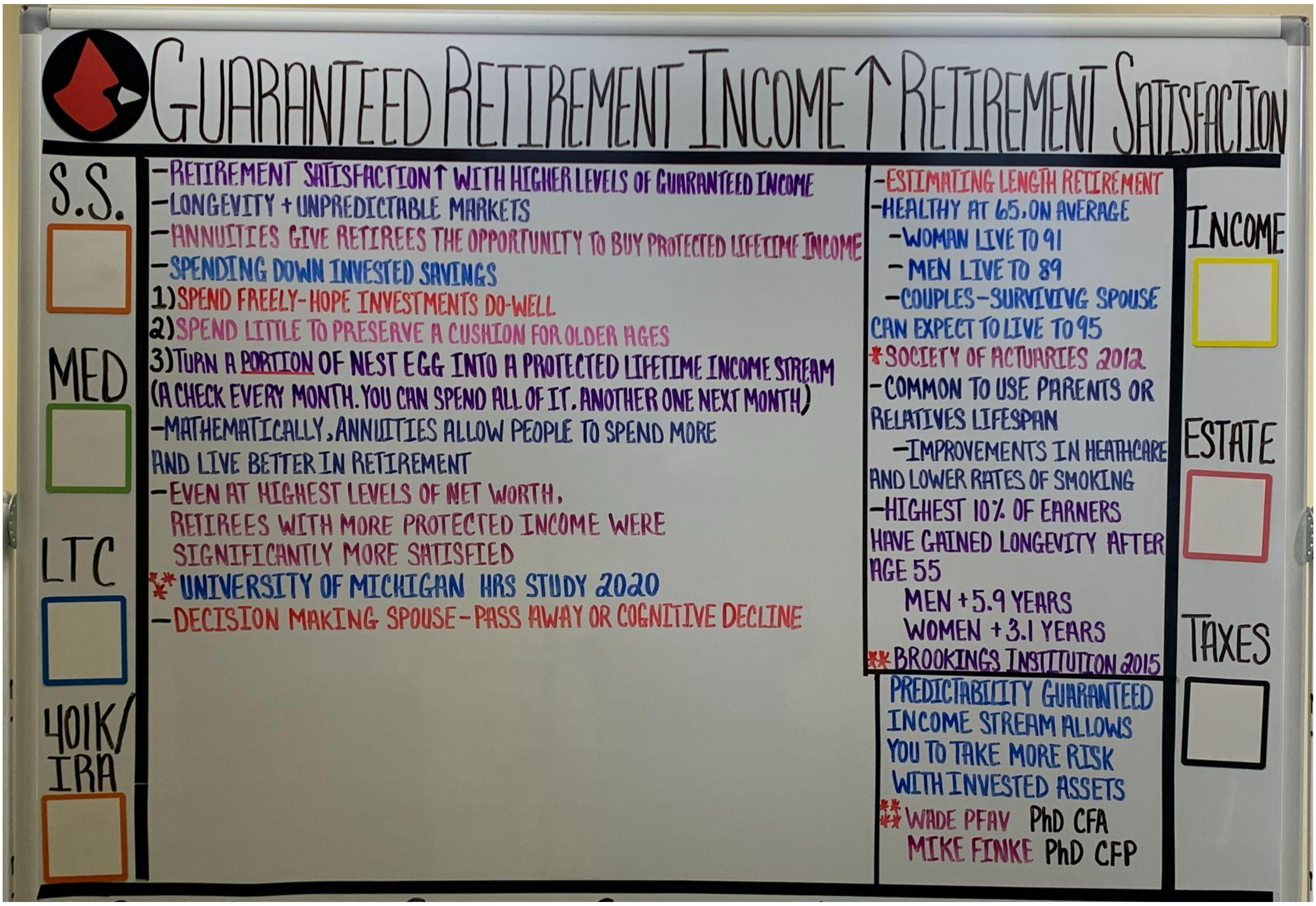
CARDINAL ADVISORS

Guaranteed Retirement Income Increases Retirement Satisfaction

In the video entitled "Guaranteed Retirement Income Increases Retirement Satisfaction" Hans and Tom use the following Nationwide document.



March 2025

Nationwide Retirement Institute® | Total Retirement Income Planning

Guaranteed retirement income increases retirement satisfaction

A research-based investigation of the role for annuities and in-plan guarantees

Wade D. Pfau, Ph.D., CFA®, RICP®
Professor of Practice
The American College of Financial Services

Michael Finke, Ph.D., CFP®
Professor of Wealth Management
The American College of Financial Services

Key takeaways

- Both longevity and unpredictable markets can wreak havoc on a retiree's ability to stretch their retirement savings for a lifetime
- Retirement satisfaction is shown to increase with higher levels of guaranteed income
- Many options allow for integration of protected retirement income into planning scenarios
- The remainder of the portfolio can be reallocated to stay ahead of inflation

Executive summary

Creating an income from savings in retirement is complicated by two important sources of uncertainty: Investment returns could be lower than expected, and one could end up living longer than planned. Longevity and unpredictable markets can wreak havoc on a retiree's ability to stretch their retirement savings for a lifetime. Today's retiree must find a way to turn savings into income to fund more years of spending on average than previous generations, and they must do this while starting with fewer sources of protected lifelong income.

Annuities and in-plan guarantees give retirees the opportunity to buy protected lifetime income, backed by an insurance company, to reduce the risk of unknown longevity and poor investment returns. An approach that combines protected lifetime income sources and investments can help a retiree meet spending goals more efficiently than an investments-only approach — both from a financial and an emotional perspective. Protected income allows retirees to spend more and worry less.

Retirement satisfaction data show that today's retirees who have more lifetime income are more satisfied with their retirement. As the amount of protected income rises, so does retirement satisfaction even among those who have a higher net worth and among older retirees.[1] The stability and security of guaranteed income helps retirees worry less about the consequences of ups and downs in the market. The assurance of income that won't run out in old age can also give retirees the confidence to spend more on things they enjoy, even after a market loss. Annuities and/or in-plan guarantees must be treated as essential tools in the retirement planning toolkit.

[1] "The Health and Retirement Study," hrs.isr.umich.edu (2020).

Introduction

How much can I safely spend in retirement? Answering this question was easier for retirees who could count on a pension and Social Security benefits to pay for most of their living expenses. The question is more complex for today's retiree, who arrives at retirement with a nest egg of savings in retirement accounts such as an IRA or a 401(k).

Spending down savings is complicated by two important unknowns. A retiree doesn't know what returns they'll receive on their investments, and they don't know how long retirement will last. There are two ways to deal with this uncertainty. A retiree can either spend freely and hope that their investments will perform well and they won't outlive their savings, or they can be cautious and spend little in order to preserve a cushion of savings into their old age.

There is a third option. Protected income options, such as annuities and in-plan guarantees, allow a retiree to use a part of their retirement nest egg in a lifetime income stream. This provides the flexibility to use a portion of a retirement nest egg to buy the same type of lifetime income that helped workers in previous generations understand how much they could safely spend.

Additional protected income allows retirees to spend more every year because they don't have to worry about their savings running out in old age. This is why economists who study retirement income planning refer to the decision not to buy insurance products as a real head-scratcher. Why would people spend less or face the possibility of running out of money when they could pass along longevity and market risks to an insurance company?

Protected income options, such as annuities and in-plan guarantees, allow a retiree to invest a portion of their savings in a lifetime income stream.

Understanding the retirement income puzzle

Let's assume that a client wants to spend $40,000 per year starting at age 65. Is $500,000 enough to fund this goal? If they invested in less volatile assets (such as CDs or Treasury bonds), earning 5% net of expenses, the half-million dollars would last about 20 years, or to the age of 85. For this retirement income strategy to work, the client and their spouse can't live beyond the age of 85.

How likely are they to live past the age of 85? More likely than they might think.[2] The column to the right displays the average life expectancies today:

Individuals who are healthy at age 65, on average:

Women can expect to live to **age 91**

Men can expect to live to **age 89**

Couples who are healthy at age 65:

On average, a **surviving spouse** can expect to live to **age 95**

If these numbers seem high, it is because Americans who earn more money in their lifetimes have made remarkable improvements in retirement-age longevity in recent decades.

As shown in a recent 20-year period, the **highest 10% of earners** have gained longevity after age 55[3]:

Men	Women
+5.9 years	+3.1 years

[2] Society of Actuaries 2012 individual annuity mortality tables adjusted for 1% annual improvement.

[3] "Growing Gap in Longevity Between Rich and Poor," Barry Bosworth, Gary Burtless and Ken Zhang, Brookings Institution (2015).

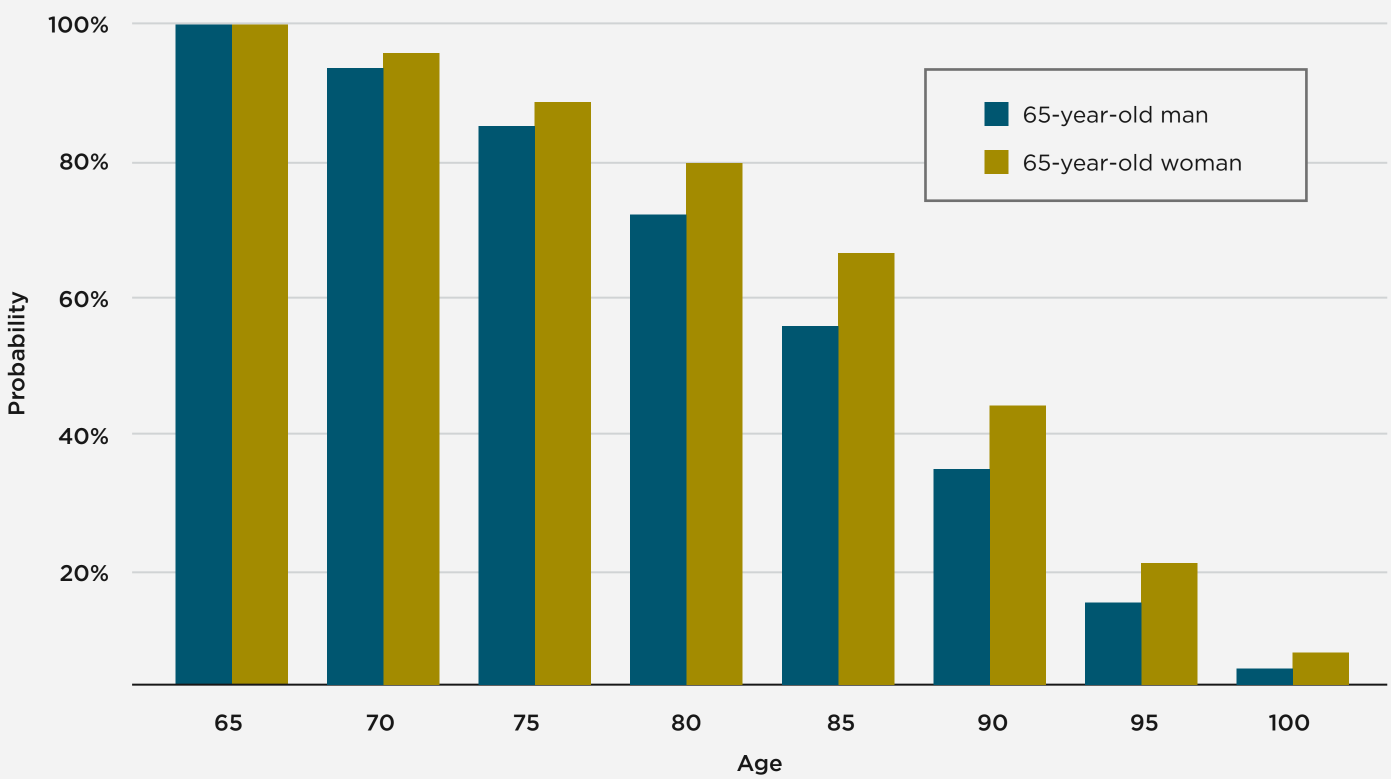
It's common to think of how long one's parents or relatives lived when estimating the length of one's own retirement, but improvements in health care and lower rates of smoking mean that most can count on living more years than their parents.

The improving health of American retirees is good news, but it also increases the cost of funding a lifestyle. Think of longevity as a bell curve. Most people will live to around the average expected longevity. Some people will get lucky and live a bit longer. And still others will live to an age that is on the far-right end of the bell curve. How much can someone spend each year if they're one of the bell curve standouts?

Imagine that you have a single birthday cake and need to cut each guest a slice as they walk through the door. You expect that somewhere between 10 and 40 people will show up to the party. On average, there will be 25 people. How big of a slice do you cut for the first guest as they walk through the door? Cut the cake into 25 pieces and there is a 50% chance you'll run out. If you cut it into 40 slices, you're not going to run out, but each guest will get a much smaller slice. Cut it into 35 pieces and people will be a little happier, but there's still a chance you might run out of cake.

Retirees face the same problem with their savings. A 65-year old may live 25 years on average, but if they slice their savings into only 25 pieces, there's a 50% chance they'll run out of money. As the following chart shows, even those who plan for retirement income to age 100 face a certain amount of risk of running out of money.

Probability of a healthy 65-year-old living to a certain age



This chart assumes the individual has already made it to age 65, is a nonsmoker and is of average health.

Source: longevityillustrator.org/

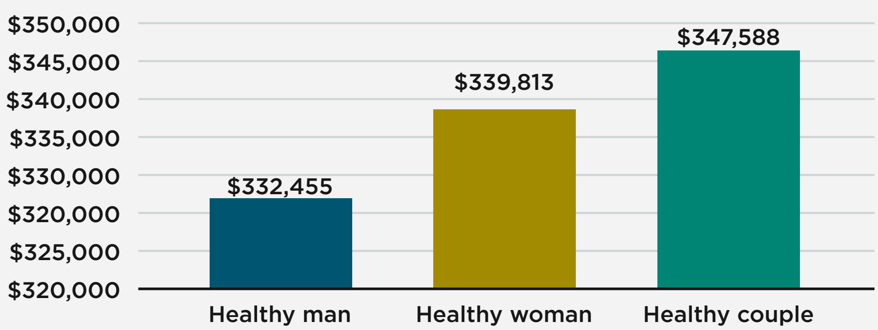
How can retirees fund a longer retirement?

An easy way to find out how much money a retiree needs to save to fund a longer retirement is to estimate the cost of creating a base of income to various ages using less-volatile investments. Returns on financial assets are generally variable, but it is possible to buy Treasury bonds that will mature and provide a future income that isn't subject to investment risk.

Figure 1 compares the cost of buying a safe income using Treasury bonds to the age at which a healthy man, woman and couple have a 20% chance of outliving their savings. For example, a healthy 65-year-old man has a 20% chance of reaching the age of 92.91 years. The cost of funding $20,000 of income from Treasury bonds at today's yields will be $332,455 today to an age at which he has a 20% chance of "failure." Because women and couples can expect to live longer, they will need to set aside even more today to fund the same $20,000 income into old age.

Cost of $20,000 annual Treasury bond income

Figure 1: Cost of funding $20,000 of income from Treasury bonds with an 80% chance of success (using yields as of April 12, 2024).



In the birthday cake example, imagine that there was a bakery that offered to let you cut the first cake into 25 pieces and then promised to provide additional slices of cake if more than the average number of guests showed up. This would allow each guest to get a bigger slice of cake, and you would worry less about running out.

Likewise, an insurance company can allow a client to spend as if they were going to live to an average life expectancy and promise to continue paying income if they live longer. Both examples involve a transfer of risk to an institution: a bakery and an insurance company. Transferring risk allows clients to spend more each year from savings without having to worry about running out.

Remember, the healthy couple in Figure 1 wants to fund $20,000 in annual income at age 65. If they agree that essential expenses should be funded with safe investments such as bonds, then it is possible to point out that a bond investment requires an acceptance of some possibility of outliving assets, while insurance products provide the security of lifetime income at a lower cost.

Rather than setting aside $347,588 and accepting a 20% chance of outliving their savings, they can buy a fixed immediate annuity for just $270,636. Buying the immediate annuity means they've spent over $75,000 less; that's money they can invest elsewhere, use to fund lifestyle expenses or put toward leaving a legacy. They can also avoid the worry of accepting a 20% chance of outliving their savings.

Is there an alternative to funding a stable income using investments?

Yes: Create an income plan that transfers longevity risk to an insurance company through the use of an annuity or in-plan guarantee.

Treasury bonds
$20,000 for 25 years

- **Cost = $347,588**
- **20% chance of outliving savings**

Fixed immediate annuity
(assume 7.39% payout rate)
$20,000 per year for life

- **Cost = $270,636**
- **Nearly $77,000 freed up for other uses**
- **0% chance of outliving savings**

Creating a more satisfying retirement

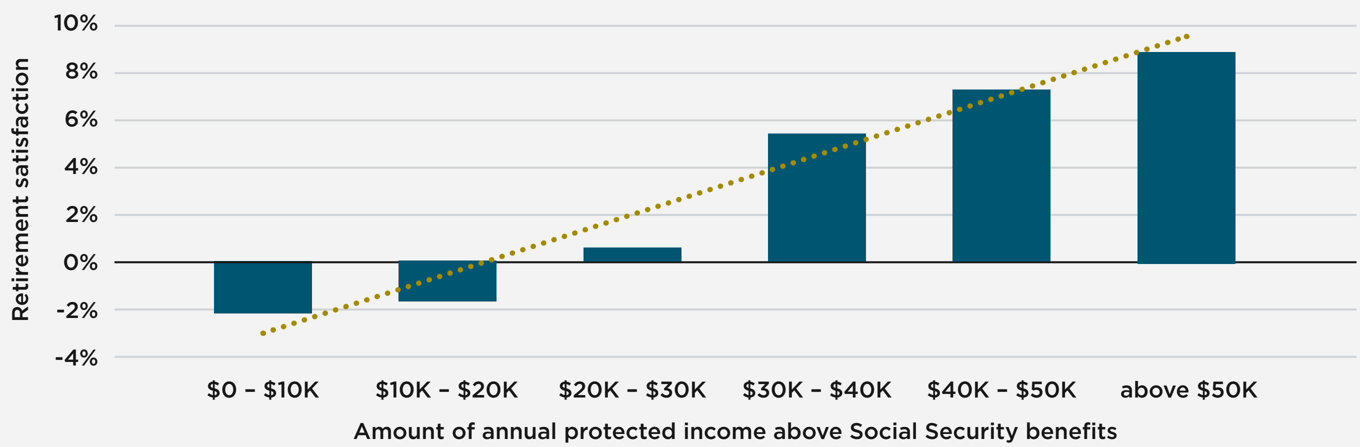
Mathematically, annuities tend to allow people to spend more and live better each year in retirement. But are people who have such protected income more satisfied with their retirement?

We can confirm that they are by analyzing data from the Health and Retirement Study (HRS). The HRS is a survey of approximately 20,000 older Americans conducted through the University of Michigan.[1] The 2020 wave of the survey includes a question that asks retirees to estimate the amount of satisfaction they are experiencing with their life in retirement. Responses range from 1 to 5, and in our illustrations, we standardize them to the average response by all survey respondents and show the percentage change from that average.

Although income annuities remain rare in the United States, many current retirees worked in an era when they were eligible to receive regular guaranteed income through a pension. Figure 2 displays the percentage of change in retirement satisfaction by level of guaranteed income.

Retirement satisfaction and protected income

Figure 2: Retirement satisfaction by quantity of protected income. (Responses have been restructured around the mean.)



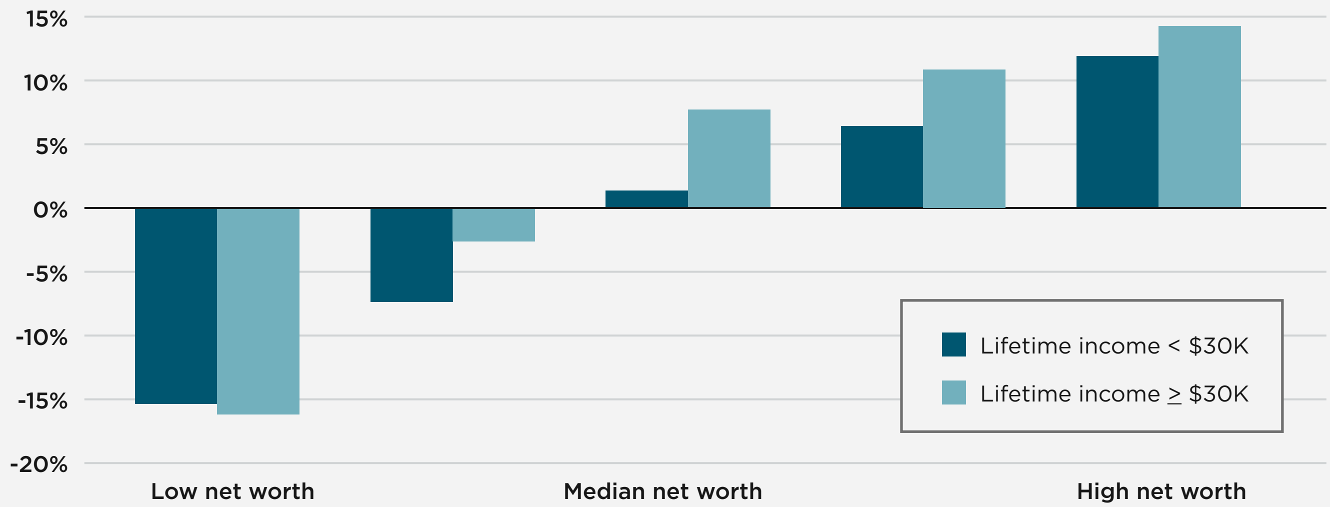
Retirees who have more protected income are more satisfied with their retirement. Even at the highest levels of net worth, retirees with more protected income were sigificantly more satisfied.

The relationship between retirement satisfaction and the amount of protected annual income above Social Security is nearly linear, meaning that satisfaction rises consistently as protected income increases. Retirement satisfaction appears to jump considerably at the $30,000 to $40,000 level per household, or about an additional $3,000 per month of income.

Does having more lifetime income contribute to life satisfaction even among those who have a larger nest egg? To answer that question, we look at households that have at least $30,000 of protected annual income within wealth categories. Even at the highest levels of net worth, retirees with more protected income were significantly more satisfied. Figure 3, on the next page, shows the difference in standardized retirement satisfaction from the lowest 20% of net worth through the highest 20% of net worth among households with and without at least $30,000 of guaranteed income. At nearly all levels of wealth, more guaranteed income had a strong positive impact on retiree satisfaction.

Retirement satisfaction by net worth and amount of protected income

Figure 3: Retirement satisfaction by net worth and annual guaranteed income levels of $30,000 or more (above and beyond Social Security benefits). (Responses have been restructured around the mean.)

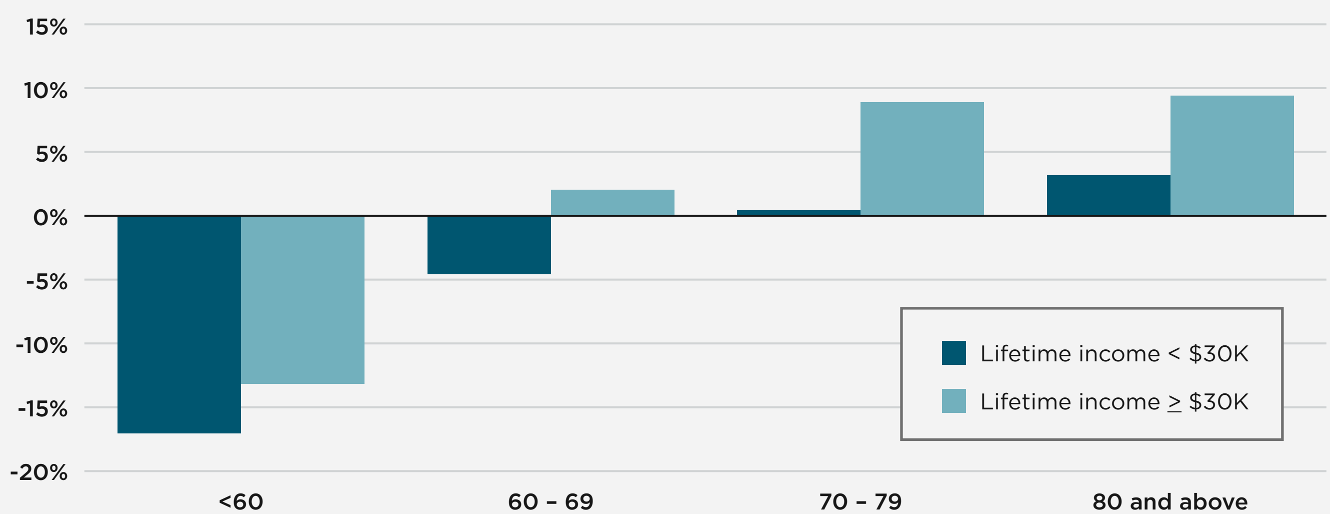


Note: According to the Bureau of Labor Statistics, $30,000 of income in January 2020, had the same purchasing power as $35,866 in January 2024.

Figure 4, below, compares the changes in retirement satisfaction by retiree age category and whether the retiree receives at least $30,000 in guaranteed annual income. At all ages, those who have a guaranteed income amount of at least $30,000 are significantly more satisfied with retirement than those with less guaranteed income. Interestingly, older retirees who have adjusted to the retirement lifestyle are generally more satisfied with retirement, and retirees over 70 are most satisfied with higher levels of lifetime income. This may not be surprising because as we age, we place a greater value on an income source that does not require the complexity of pulling money out of savings.

Retirement satisfaction by age group and amount of protected income

Figure 4: Retirement satisfaction by age and guaranteed income. (Responses have been restructured around the mean.)



Note: According to the Bureau of labor Statistics, $30,000 of income in January 2020 had the same purchasing power as $35,866 in January 2024.

Why does guaranteed income positively impact retirement satisfaction?

Why does a foundation of guaranteed income have such a large impact on satisfaction in retirement? We can identify several important reasons.

Reduced spending uncertainty

The fundamental nature of risk for retirees is the threat that events take place (unexpectedly long life, poor market returns, spending shocks) that trigger a permanently lowered standard of living in subsequent years. Having more reliable income with lifetime protections in place reduces a retiree's exposure to this retirement risk.

Retirees facing the prospect of funding a lifestyle from savings are often anxious about the prospect of spending down their nest egg. This lack of clarity results in suboptimal spending behavior and lower life satisfaction as retirees do not know how much they can safely spend.

For retirees who receive income from insurance products offering lifetime protections, these regular checks provide the freedom to spend without guilt or anxiety. Many regard the annuity payment and Social Security as their monthly budget. They feel a sense of freedom and safety when spending their guaranteed income, while they do not feel similarly comfortable spending down their savings. Some retirees are uncomfortable using risky assets to fund their essential — and often inflexible — retirement expenses. Protected income sources can provide comfort that the retirement plan is sustainable in the face of longevity and market risk.

Automation for managing assets and spending

Workers accustomed to regular payroll deductions into a 401(k) that are invested in fully automated qualified default (target date) mutual funds often have little interest in managing an investment portfolio in retirement. They have no desire to understand the complexities of efficient portfolio management. For these simplicity-seeking investors, automating income in retirement rather than managing a complex portfolio is particularly appealing. Such investors may also be less willing to accept investment risk in retirement. For them, presenting guaranteed income as a low-risk, simple alternative to a managed portfolio may be particularly appealing.

Retirees receiving lifetime income checks feel a sense of freedom and safety when spending their guaranteed income.

The ability to accept investment risk

If a client's guaranteed income is not vulnerable to downside risk, will they respond differently to inevitable ups and downs in the markets? It is likely that the answer is yes, as having guaranteed income allows them to accept market volatility. A good analogy is the importance of a safety net to a trapeze artist in a circus. Knowing that the consequences of failure are not as bad makes the acrobat feel more comfortable about taking risks.

This is important because inflation will continue to raise the price of essential expenses. We've been talking about the "sweet spot" of $30,000 in annual guaranteed income above and beyond Social Security benefits, but that research was done in 2020.

According to the Bureau of Labor Statistics, $30,000 of income in January 2020 had the same purchasing power as $35,866 in January 2024. That's a big jump that reflects the recent period of higher-than-average inflation.

With guaranteed income in place, the retiree has greater risk capacity for what remains. This may help them accept a higher stock allocation in the rest of their portfolio and also to have the wherewithal to stay the course with an asset allocation strategy in the face of market volatility.

Protection of a less financially knowledgeable spouse

Not always, but often, the higher-earning spouse is the primary financial decision-maker in a couple. This individual is likely to exert greater influence on retirement income strategies when working with a financial professional.

The decision-making spouse may be comfortable with managing an investment portfolio through retirement to fund the couple's lifestyle. But what will happen if that person passes away or experiences cognitive decline? Will the surviving spouse be just as comfortable drawing income from an investment portfolio, or does it make more sense to have a source of guaranteed income that will continue to sustain the surviving spouse's spending needs for the remainder of his or her life?

Although a less-involved spouse may not be interested in participating in a discussion about retirement investment strategies, it is valuable to include the perspective of both spouses when developing a plan. This is particularly important for couples who differ in comfort levels with investing and financial acumen.

In addition to differences in knowledge, there may be differences in spending behavior between spouses. Couples may choose a protected income allocation because one spouse has a more difficult time managing their spending. The lifetime income ensures that the couple can live within their means and preserve some of their nest egg for the next generation.

Retirement confidence

There is a reason that retirees with protected income report greater life satisfaction. Their income provides them with a monthly budget. They do not experience the anxiety that comes from spending down their nest egg. They are, emotionally speaking, better able to withstand investment volatility.

A retiree might choose to invest in risky assets to maintain purchasing power in the face of inflation or to increase the likelihood of an improved lifestyle in the future. Surprisingly, many retirees felt that spending more beyond essential expenses would not provide them with a better lifestyle in retirement. It was most important that essential expenses were covered. This creates risk capacity to invest in equities with nonannuity assets, which improves the odds that inflation adjustments for spending can be met.

Three case studies with partial annuity strategies

In addition to the psychological benefits provided by insurance products, a strong quantitative case can be made for incorporating risk pooling into a retirement income strategy to more efficiently manage longevity risk. The easiest way to show how is through case studies. Each example shows that by adding lifetime income protections to their retirement portfolio, a retiree can get the same or higher income with lower risk of outliving their savings.

These case studies use return projections to demonstrate how risk pooling can lay the foundation for a stronger ability to meet a spending goal and preserve assets over the long term in various market environments. The case studies are hypothetical examples and do not reflect specific client results.

Common assumptions across the case studies

Each case study has important differences, but first we outline assumptions held in common among them.

Time horizon: 30 years (from ages 65-95)
For each case study, the retirement planning horizon is 30 years, from age 65 to 95 (as monitored for the youngest spouse when relevant).

Income expectations: Investments should generate an additional $30,000 annually
The purpose is to supplement Social Security retirement benefits.

The retirees seek to spend a fixed $30,000 annually from the asset base. In each case, the scenario will be set up so that the annuity provides at least slightly more than the $30,000 spending goal. **Any surplus over the spending goal generated from the annuity will be invested into a brokerage account to support future liquidity and legacy.** (This is compared with an investments-only strategy in which the $30,000 spending goal is distributed entirely from the investment portfolio. The side account exists only in the comparison that uses an annuity, not the unprotected investment portfolio example.)

Gross real return assumptions (before fees)

For these case studies, we use three unique sets of market returns to approximate what may happen with a mix of "good," "average" and "poor" market environments. In all cases, inflation is assumed to be 2.5%, and a fixed real return (the rate of return net of inflation) is added to this in each market scenario.

- In the "good" market environment, stocks add a gross real return of 8% and bonds add 2.5% (10.5% and 5%, before inflation)
- In the "average" market environment, stocks add 6% while bonds add 1.25% (for 8.5% and 3.75%, before inflation)
- In the "poor" market environment, the real returns are 0% for both stocks and bonds, such that the overall returns keep pace with inflation (2.5% overall for both stocks and bonds, before inflation)
- We assume a 2% dividend yield in order to generate price returns as needed for index annuities

Additional details
Strategies were simulated with annual data. The calculations also assume that withdrawals are made at the start of each year, that fees are deducted at the end of each year, and that portfolios are rebalanced annually to restore the targeted asset allocation. Taxes are not part of this analysis.

Regarding fees held in common across the case studies, any non-annuity investment funds (both stock and bond funds) have an expense ratio of 0.4%. A financial advisor will also apply a 1% annual assets-under-management fee to assets held in an investments account. For annuity assets, the advisor is compensated through a commission built into the product's pricing. Asset fees for qualified plan dollars can range from 0.20% to 1.3%.

Case study 1: Retirement income starts in 10 years

Tony and Robyn are approaching retirement. Tony is 57 and Robyn is 55. They both expect to retire in 10 years' time, when Robyn is 65. They currently have $315,000 of assets to position for starting a distribution of $30,000 beginning in 10 years. They could invest this in a diversified investment portfolio, in which they are comfortable using an asset allocation of 40% stocks and 60% bonds. Alternatively, they are considering a variable annuity with a Guaranteed Lifetime Withdrawal Benefit (GLWB) rider that offers a 7% simple roll-up rate and annual step-up opportunities if the underlying account value reaches a new high watermark above the benefit base with roll-ups.

When beginning income in 10 years, the GLWB offers a 5.7% payout for their joint lifetimes. Product fees charged against the account value include the annuity's 1.3% mortality and expense (M&E) charge and the asset allocation fund's 1.0% expense ratio. The GLWB rider has an annual fee of 1.6% of the benefit base while the account value of the annuity remains positive. If they do not experience step-ups, they are ensured that the benefit base is $535,500 in 10 years, which translates into a minimum fixed annual payout of $30,524 for their lifetimes. As noted, any surplus distribution will be reinvested in a separate account. Because of the increased risk capacity afforded through the lifetime income protection, which reduces the exposure of their standard of living to downside market volatility, they feel comfortable investing at 60% stocks inside the variable annuity as well as for the investment account holding the surplus distributions.

Exhibit 1 provides the results for this scenario. When using the lifetime income benefit with the variable annuity, meeting the spending goal is assured in any of the market scenarios, and the only questions that remain are about how much surplus income will be generated from the annuity to be reinvested in the side account. In each market scenario, the GLWB rider's 7% annual roll-ups increase the benefit base to $535,500 by the time income starts. By age 95, the benefit base remains at $535,500 and in the "good" market scenario, $50,795 has accumulated in the side investment account. In this "good" market scenario only, the investments-only strategy also succeeded in meeting the spending goal, with $513,786 remaining at age 95.

For all market scenarios, contract value step-ups do not provide further increases to the benefit base. The variable annuity assets deplete in all cases, which makes the GLWB rider binding as a source of continued distributions supported through the risk pooling and contractual guarantees. The side investment account provides an additional $37,240 at age 95 in the "average" case and $18,585 in the "poor" case. Meanwhile, the investments-only strategy does not work in either the "average" or "poor" market scenarios. The investment account depletes at age 89 in the "average" scenario and at age 77 in the "poor" scenario. This is when the spending goal can no longer be supported and no assets remain for the household. The investment-only strategy was therefore unsuccessful in adequately protecting Tony and Robin from both longevity and market risk.

Summary of assumptions (refer to Page 10 for additional details):

Time horizon: Income is generated from ages 65 to 95, based on the age of the youngest spouse.

Inflation averages 2.5% over the 30-year period.

Gross real return expectations (net of inflation, before fees):

- In the "good" market environment, stocks add a gross real return of 8% and bonds add 2.5%
- In the "average" market environment, stocks add 6% while bonds add 1.25%
- In the "poor" market environment, the real returns are 0% for both stocks and bonds, such that the overall returns keep pace with inflation

Exhibit 1	Lifetime income benefit			Investments only		
Comparing a **variable annuity** with lifetime income benefit to an **investments-only strategy**	Total spending at 90	Age that assets deplete	Remaining assets at 95	Total spending at 90	Age that assets deplete	Remaining assets at 95
"Good" market performance	$30,000	N/A	$50,795	$30,000	N/A	$513,786
"Average" market performance	$30,000	N/A	$37,240	$0	89	$0
"Poor" market performance	$30,000	N/A	$18,585	$0	77	$0

Case study 2: Retiring in 1 year

Darren is 64 years old and single, and he is planning to retire in 1 year. He has $425,000 in assets and is exploring options for generating $30,000 annually starting at age 65. He considers a fixed indexed annuity linked to a stock market index, such as the S&P 500. It provides an immediate 30% bonus on his initial deposit and an 8% annually compounded roll-up rate, which means that his benefit base increased by 40.4% in the first year. The payout rate is 5.26% at age 65, such that the annuity generates $31,386 if step-ups do not happen, which is the case with all three market scenarios. The fixed indexed annuity crediting strategy on a 1-year strategy term has a spread of 1.95% and offers a 55% participation rate on the price returns of the stock index above the spread. The living benefit has a rider fee of 1.1% of the benefit base, and the fixed indexed annuity does not otherwise have any fees. In this case, Darren is comfortable with 40% stocks in the investments-only scenario, and he uses 60% stocks for the surplus produced by the annuity in the annuity scenario.

Exhibit 2 provides the results for this scenario. When using the lifetime income benefit with the fixed indexed annuity, meeting the spending goal is assured in any of the market scenarios, and an additional small surplus is generated by reinvesting the annual $1,386 surplus. This amount grows to $134,523 in the “good” market scenario, $98,635 in the “average” market scenario, and $49,221 in the “poor” market scenario. Meanwhile, the investments-only strategy fails to meet this spending goal in each of the three scenarios. Assets deplete at age 94 in the "good" scenario, at age 86 in the “average” scenario and at age 80 in the “poor” scenario.

Summary of assumptions (refer to Page 10 for additional details):

Time horizon: Income is generated from ages 65 to 95.

Inflation averages 2.5% over the 30-year period.

Gross real return expectations (net of inflation, before fees):

- In the “good” market environment, stocks add a gross real return of 8% and bonds add 2.5%
- In the “average” market environment, stocks add 6% while bonds add 1.25%
- In the “poor” market environment, the real returns are 0% for both stocks and bonds, such that the overall returns keep pace with inflation

Exhibit 2

Comparing a **fixed indexed annuity** with lifetime income benefit to an **investments-only strategy**

	Lifetime income benefit			Investments only		
	Total spending at 90	Age that assets deplete	Remaining assets at 95	Total spending at 90	Age that assets deplete	Remaining assets at 95
"Good" market performance	$30,000	N/A	$134,523	$30,000	94	$0
"Average" market performance	$30,000	N/A	$98,635	$0	86	$0
"Poor" market performance	$30,000	N/A	$49,221	$0	80	$0

Case study 3: Exploring the lifetime income option in a defined contribution retirement plan

In the final case study, we consider a protected income option[4] in Donna's defined contribution retirement plan. Donna is 60 and single, and she plans to retire at 65. She currently has $600,000 saved in her retirement plan to position for starting a distribution of $30,000 beginning in 5 years. She is more risk-averse than the folks in the other case studies. She is comfortable using 30% stocks with a diversified investment portfolio. If she uses an in-plan guarantee investment option that offers a lifetime income benefit, she is comfortable selecting a target date fund with a stock allocation to 45% both in the protected income option and with the side investment account for any surplus distributions.

The plan's protected lifetime income options do not have a roll-up rate, but they do support annual step-up opportunities if the underlying account value reaches a new high watermark above the benefit base. When beginning income in 5 years, the investment option offers a 5% payout rate. The fund has a Guaranteed Lifetime Withdrawal Benefit fee of 1.00% and additional fund fees of 0.30%, all charged on the account value.

In all three market scenarios, the returns are large enough to exceed the fees so that the benefit base will be larger at retirement. In the "good" market scenario, the benefit base grows to $805,887 at 65, supporting a distribution of $40,294, and it further grows to $1,015,595 at 95. The legacy at 95 consists of $1,015,595 as the account value of the annuity and $1,144,288 in the side investment account used for surplus distributions for a total of $2,159,883. In the "average" market scenario, the benefit base grows to $748,101 at 65, supporting a distribution of $37,405. Once distributions begin, further step-ups are not feasible. The legacy at 95 consists of $421,362 as the account value of the fund and $464,147 in the side investment account for a total of $885,509. Finally, In the "poor" market scenario, the benefit base grows to $635,852 at 65, supporting a distribution of $31,793. Once distributions begin, further step-ups are not feasible, and the account value depletes before age 95. The legacy at 95 consists of $63,642 in the side investment account.

With the investments-only approach, the spending goal can be met through age 95 in the "good" and "average" scenarios, but the remaining legacy is less. It is $1,333,863 in the "good" scenario and $481,185 in the "average scenario." In the "poor" scenario, funds deplete at age 88. The protected income option has again supported better outcomes in all three of these diverse market scenarios.

Summary of assumptions (refer to Page 10 for additional details):

Time horizon: Income is generated from ages 65 to 95.

Inflation averages 2.5% over the 30-year period.

Gross real return expectations (net of inflation, before fees):

- In the "good" market environment, stocks add a gross real return of 8% and bonds add 2.5%
- In the "average" market environment, stocks add 6% while bonds add 1.25%
- In the "poor" market environment, the real returns are 0% for both stocks and bonds, such that the overall returns keep pace with inflation

Exhibit 3

Comparing an **in-plan guarantee** to an **investments-only strategy inside of a qualified retirement plan**

	Lifetime income benefit			Investments only		
	Total spending at 90	Age that assets deplete	Remaining assets at 95	Total spending at 90	Age that assets deplete	Remaining assets at 95
"Good" market performance	$30,000	N/A	$2,159,883	$30,000	N/A	$1,333,863
"Average" market performance	$30,000	N/A	$885,509	$30,000	N/A	$481,185
"Poor" market performance	$30,000	N/A	$63,642	$0	88	$0

[4] Guarantees are subject to the claims-paying ability of the issuing insurance company. Provisions of these options may vary based on plan selection and/or by state regulation. These investment options may not be available in some states.

Conclusion

A wide selection of products gives retirees the opportunity to buy protected lifetime income through an insurance company. Those products also give pre-retirees the opportunity to allocate part of their deferred compensation assets to a protected retirement investment. An approach that combines lifetime income and investments can help a retiree meet spending goals more efficiently than an investments-only approach — both from a financial and an emotional perspective. Annuities and in-plan guarantees allow retirees to spend more and worry less.

Retirement satisfaction data show that today's retirees who have more protected income are more satisfied with their retirement. As protected income rises, so does retirement satisfaction — even among those who have a higher net worth and among older retirees. The stability and security of guaranteed income help retirees worry less about the consequences of ups and downs in the market.

The assurance of income that won't run out in old age can also give retirees the confidence to spend more on things they enjoy even after a market loss.

The addition of protected lifetime income investments to a retirement portfolio allows a retiree to get the same or higher income with less risk of outliving savings than an investments-only approach. These allocations allow a retiree to spend at a level that investments alone would be unable to match without significant risk of running out of money before age 95. Blending protected income and investments can also enhance the legacy value of assets over the long term.

For retirees, it's about more than money. Not only do these added protections provide income that can't be outlived, they offer confidence and more financial security — something you can't put a price tag on.

About the authors

Wade D. Pfau, Ph.D., CFA®, RICP® is the founder of Retirement Researcher, an educational resource for individuals and financial advisors on topics related to retirement income planning. He is a co-founder of the Retirement Income Style Awareness tool and a co-host of the "Retire With Style" podcast. He also serves as a principal and the director of retirement research for McLean Asset Management and as a Research Fellow with the Alliance for Lifetime Income and the Retirement Income Institute. A professor of practice at The American College of Financial Services and past director of the Retirement Income Certified Professional® (RICP®) designation program, he holds a doctorate in economics from Princeton University and has published more than 60 peer-reviewed research articles in a wide variety of academic and practitioner journals. He is a contributor to Forbes and Advisor Perspectives, and he's an Expert Panelist for The Wall Street Journal. Wade's newest book is **Retirement Planning Guidebook: Navigating the Important Decisions for Retirement Success.** He is also the author of three other books in the Retirement Researcher Guide Series.

Michael Finke, Ph.D., CFP® is a professor and Frank M. Engle Distinguished Chair in Economic Security at The American College of Financial Services. He received a doctorate in consumer economics from The Ohio State University in 1998 and in finance from the University of Missouri in 2011. He leads the O. Alfred Granum Center for Financial Security at the American College and is a Research Fellow at the Retirement Income Institute. He is also a member of the Defined Contribution Institutional Investment Association Academic Advisory Council and serves as a Trustee on the Pension Reserve Trust of Puerto Rico. He is a nationally known researcher in the areas of retirement income planning, retirement spending, life satisfaction and cognitive aging, and he was named one of the 25 most influential people in the field of investment advising in 2020 and 2021 by Investment Advisor magazine.

FOR FINANCIAL PROFESSIONAL USE — NOT FOR DISTRIBUTION TO THE PUBLIC

• Not a deposit • Not FDIC or NCUSIF insured • Not guaranteed by the institution
• Not insured by any federal government agency • May lose value

This material is not a recommendation to buy or sell a financial product or to adopt an investment strategy. Investors should discuss their specific situation with their financial professional.

The study referenced in this summary was sponsored by Nationwide and is the proprietary property of The American College of Financial Services. It may not be reproduced, in whole or in part, in any manner, without the prior written consent of The American College of Financial Services. The American College of Financial Services and its affiliates are not related to Nationwide and its affiliates.

The Health and Retirement Study (HRS) is sponsored by the National Institute on Aging (grant number NIA U01AG009740) and is conducted by the University of Michigan.

Nationwide does not control any third party presenting information and is not responsible for their comments. Sponsorship of a third party does not imply endorsement of the information presented. Views and opinions are those of the authors and do not necessarily represent the opinions of Nationwide.

When evaluating the purchase of an annuity, your clients should be aware that annuities have limitations. They are long-term vehicles designed for retirement purposes. They are not intended to replace emergency funds, to be used as income for day-to-day expenses or to fund short-term savings goals. Please read the contract for complete details. Withdrawals are subject to income tax, and withdrawals before age 59½ may be subject to a 10% early withdrawal federal tax penalty.

All guarantees and protections are subject the claims-paying ability of the issuing insurance company.

Nationwide Investment Services Corporation, member FINRA, Columbus, Ohio.

NFM-24005AO.2 (12/24)

ADA File Info

Title: Guaranteed retirement income increases retirement satisfaction

Description: Research by authors Wade Pfau and Michael Finke of The American College of Financial Services has shown that retirees who have additional guaranteed lifetime income above and beyond Social Security benefits experience increased levels of satisfaction compared to those who don't. The more guaranteed income they have, the more satisfied they are.

Page 3, Chart Alt Text: Chart showing that among healthy 65-year-olds today, men have a greater than 15% probability to live to age 95, and women greater than 20%. Some will even make it to age 100.

Page 4, Chart Alt Text: Chart showing that the cost of funding $20,000 in annual income from Treasury bonds would be nearly $350,000 for a healthy couple.

Page 5, Chart Alt Text: Chart showing the correlation between the amount of protected income in retirement and retirement satisfaction. The higher the amount of protected income, the greater the level of satisfaction.

Page 6, Chart Alt Text A: Chart showing that even those who have high net worth derive greater retirement satisfaction when their level of protected income is above $30,000 per year.

Page 6, Chart Alt Text B: Chart showing that as clients age, they derive greater and greater retirement satisfaction when their level of protected income is above $30,000 per year.