The Net Economic Benefit of Wrapping Risk with a Contingent Deferred Annuity

by Michelle Richter-Gordon, AIF®

Executive Summary

» Contingent Deferred Annuities (CDAs) are new insurer-issued designs that unbundle low-cost lifetime income guarantees from underlying investments to fit the RIA model.

» CDAs allow IARs of RIAs to offer certainty of lifetime income, provided by an insurer, by purchasing coverage for their proprietary ETF and Mutual Fund models. Adding a CDA to a portfolio allows the RIA to keep client assets and revenue while advising upon those ETF and Mutual fund investments in client IRAs, Roth IRAs, and taxable brokerage accounts. This preserves the advisor's core value during the key decumulation phase.

» Protecting a portion of a client's portfolio with retirement income insurance in the form of a CDA can inspire clients and advisers to remain allocated to equities in retirement, which can materially increase average value of both income and account value relative to a more conservatively allocated portfolio over time, while the insurer-issued CDA provides clients with guaranteed income in down markets.

» Based on running 1,000 Monte Carlo simulations, a portfolio with 50% of assets covered by a CDA offers significantly better outcomes in terms of Net Economic Benefit vs. an unprotected portfolio utilizing RMD-inspired withdrawal patterns.

» Investors with sizable assets at retirement may not face the probability of exhausting their assets, since they may be able to adjust spending. However, those investors who choose to add a CDA to their portfolio may enjoy a more stable and better retirement than do their uninsured counterparts. Inclusion of CDA enables more scenarios in which spending need not decrease. Most modeled scenarios enable income increases, and even if contractholders never use the guarantee, in most markets, they may do materially better (in terms of net economic benefit) with the higher equity allocation a CDA may enable.

Introduction

Depending upon whom you ask, annuity perceptions among consumers and advisors can range all the way from a belief that annuities are a panacea for all of America's retirement undersaving ills, to a belief that annuities are too complex, too expensive, and too fraught with compensation conflicts to ever prove useful. This latter perception is particularly common within the RIA community.

RIAs often provide value to their clients by constructing portfolios comprised of low-cost products, where the advisor's value proposition is very much a function of providing and implementing ongoing investment management strategy recommendations. Traditional income guarantees via immediate annuities or variable annuities can conflict directly with RIAs' ability to provide and implement ongoing investment management strategy recommendations.

RetireOne's market introduction of a Contingent Deferred Annuity in 2021 marks the tip of an insurance product development spear penetrating RIA territory with a guaranteed lifetime income solution that integrates with existing RIA business models and securities selection preferences.

This zero-commission annuity is designed to wrap RIA-controlled assets with an income guarantee and may provide additional value to

"[CDA] also meets the needs of the investors it was designed to serve since the fortunes of the RIA and their clients are often coupled together in the advice model."

firms running proprietary models by keeping those assets and revenue streams intact. The more asset-aggressive portfolio including CDA also offers a higher billing base in more than half of analyzed scenarios than does the compared uncovered portfolio, and allows data integration, liquidity and heritability on the remaining asset base, without changing the assets' tax character.

Because the design of the CDA is inherently RIA-friendly, it also meets the needs of the investors it was designed to serve since the fortunes of the RIA and their clients are often coupled together in the advice model.

The purpose of this paper is to compare how, unlike historically common annuity constructs that either have flexibility/liquidity limitations (immediate annuity) or investment choice limitations (VA-GLWB), advisers wrapping their preferred portfolio allocations with a CDA can favorably impact client outcomes when compared with safe withdrawal methodologies in an unprotected portfolio.

About Contingent Deferred Annuities

Despite their inherent value, and advocacy by some academic economists, Americans don't typically buy traditional income annuities. "Why don't they annuitize?" is so frequently asked by academic economists that, within

financial professional circles, it is known by a distinctive shorthand as "The Annuity Puzzle." Many reasons are posited for why Americans choose not to annuitize: cost, complexity, inflexibility, and more. One less frequently posited potential explanation is that purchasing a life-only immediate annuity is *a more **permanent** life decision than is the most mainstream decision we think of culturally as permanent—that is, marriage.*

Few of us would enter marriage with the intention to commute (divorce), yet sadly, 50% of American couples ultimately do divorce. This option to divorce is legally available to married couples, and this option has value to it whether it is exercised or not.

While the vast majority of annuitized annuities do have liquidity options, few if any allow full commutation, hence the argument that the purchase of an immediate annuity is a more permanent decision for the purchaser than is getting married. Framed this way, it is no puzzle at all to detect why immediate annuities are not more popular with purchasers.

Contingent deferred annuities are designed expressly to break down the barriers to adoption of traditional income annuities. One key innovation is the unbundling of insurance protections from underlying investments.

Unbundling allows the RIA to wrap any approved retail ETFs or mutual funds with which they and their client are comfortable—not merely a limited menu of insurance-dedicated investments—with a contractually separate option for lifetime income. Separating the income guarantee from the underlying investments creates a flexible structure that

allows the assets to remain at the custodian, and allows for the coverage to be cancelled at any time without tax or financial impacts.

The investor may draw income from the covered asset at a defined payout rate according to a benefit base that is typically guaranteed to not be less than the initial investment. This benefit base can grow as the portfolio grows. Withdrawals continue until the covered asset is depleted, at which time the issuing insurance company continues the income payments. The annuity, then, is contingent upon asset depletion, and deferred until such time.

As mentioned above, CDAs are cancellable with no surrender charge; one implication of this benefit is that, if portfolio values rise to a point where the investor no longer worries about safely generating income for life, the CDA option can be dropped, and costs saved accordingly.

Since the CDA does not inherently require asset liquidation, adding it to a portfolio would not change the tax character of underlying investments.[1] Using a CDA, advisors can then continue to employ their tax-managed strategies in client portfolios.

Case Study: Abe and Sasha

Abe and Sasha are a 60-year-old couple with $1,000,000 in retirement savings. They intend to start drawing income from their portfolio when they turn 65 and their income target is 4% of their portfolio's value at the time income commences. They would like to target increasing this spending amount by 2% a year to help offset the impact of inflation on their lifestyle. This is an example of the "4% rule" of retirement spending made popular in the 1990s by financial

Table 1. Comparing CDA to some other methods for creating income streams

	Contingent Deferred Annuity (CDA)	Single Premium Immediate Annuity (SPIA) (life-only)	Variable Annuity with GLWB and Death Benefit	RMD-inspired withdrawal rate
Guaranteed income for life	Yes	Yes	Yes	No
Option for step up in income payouts	Yes	No	Some	No
Tax efficiencies	Doesn't change tax character of underlying investments; insurer-paid benefits income taxable	Exclusion ratio applies when nonqualified, income rates applied	Ordinary income rates on gains/bequest	Doesn't change tax character of underlying investments
Investment Choice	Publicly traded ETFs and Mutual Funds (proprietary models)	No	Limited selection of subaccounts - Variable Insurance Trusts	Publicly traded ETFs and Mutual Funds (proprietary models)
Equity Exposure	Insurer prices rider higher when equity exposure is higher	No	Limited by insurer	Unlimited
Liquidity	Full	No	Full – though surrender penalties may apply	Full
Wealth transfer	Step up in basis for non-qualified accounts	No	May be lower than a comparable market scenario deploying CDA, because of higher average VA fees[6]	Step in basis for non-qualified accounts
Billable by RIA	Yes	Sometimes	Sometimes	Yes

planner Bill Bengen.[2] Abe and Sasha's portfolio is currently allocated 55% to equity and 45% to fixed income instruments.

Abe and Sasha visit an advisor, John Doe CFP®, to discuss how best to source reliable lifetime income from their savings. John analyzes Abe and Sasha's likelihood of being able to meet their income goals for 30 years, from 65 to age 95, using their current investing approach. His first concern is sequence of return risk.

Addressing Sequence of Return Risk

John explains that, unlike during the accumulation phase when market fluctuations do not directly impact an investor's lifetsyle, a portfolio in decumulation, and the life experience of its owner, can be materially impacted by the order in which market returns unfold.

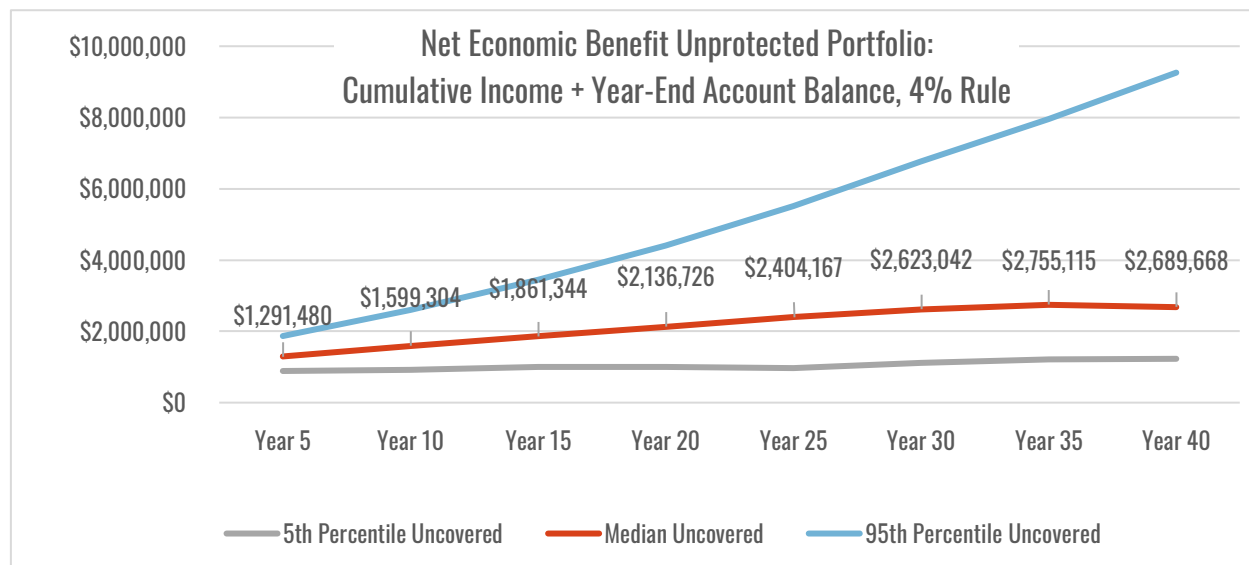*Figure 1. Ending account value, effect of loss timing*

Ending Account Value, Effect of Loss Timing

Legend: Ending Account Value- Early Loss | Ending Account Value- Loss in Year 31
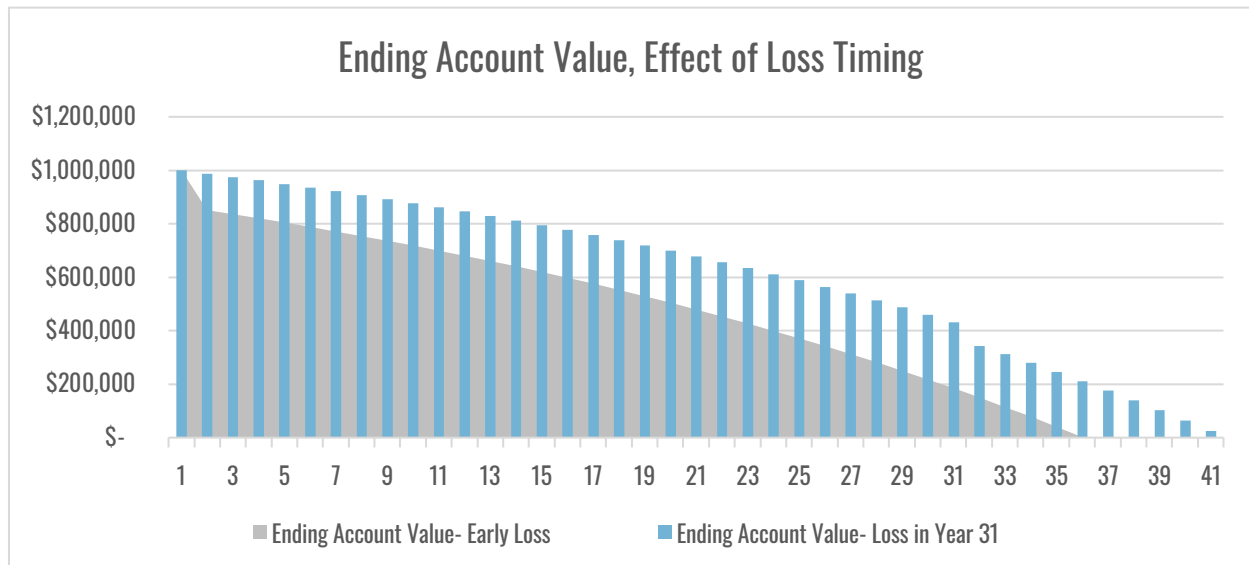
Sasha and Abe's annual income target is $40,000. John shows them how, if they invest their $1,000,000 and, immediately after turning on income, the market suddenly drops by 10%, even if the portfolio grows consistently at 4% during the remaining 40 years of projection, the impact to their sustainable income is dramatic. See "Figure 1. Ending account value, effect of loss timing"," which demonstrates how their portfolio is unable to sustain $40,000 in nominal income past year 35 (age 95, if they started income right away instead of deferring five years) in the event of early market loss. If both are healthy, there is about a 50% chance that either one of the couple will attain this age.[3]

In his full analysis, John learns that Sasha and Abe's income failure rate, which he defines as missing their income target by 10% or more in any year, is an unacceptably high 44%. He further finds that the Net Economic Benefit

Figure 2. Net economic benefit across time and scenarios, '4% rule'

Net Economic Benefit Unprotected Portfolio: Cumulative Income + Year-End Account Balance, 4% Rule

Data labels (Median Uncovered): $1,291,480 · $1,599,304 · $1,861,344 · $2,136,726 · $2,404,167 · $2,623,042 · $2,755,115 · $2,689,668

Legend: 5th Percentile Uncovered | Median Uncovered | 95th Percentile Uncovered

that Sasha and Abe may experience, which he defines as the sum of cumulative nominal income and ending account balance, varies dramatically across market environments (see "Figure 2. Net economic benefit across time and scenarios, '4% rule'" on page 5).

Addressing Income Failure Rates

The first recommendation that John considers for improving Abe and Sasha's retirement outcomes is to introduce a withdrawal strategy that adjusts spending based on portfolio results. He decides to introduce a strategy inspired by the IRS' approach to setting required minimum withdrawals (RMDs) from tax-deferred accounts. RMDs are generally determined by dividing the tax-deferred retirement account balance as of December 31 of the preceding year by a life expectancy factor determined by the government. According to researchers Wei Sun and Anthony Webb, "an RMD approach satisfies four important tests of a good strategy.
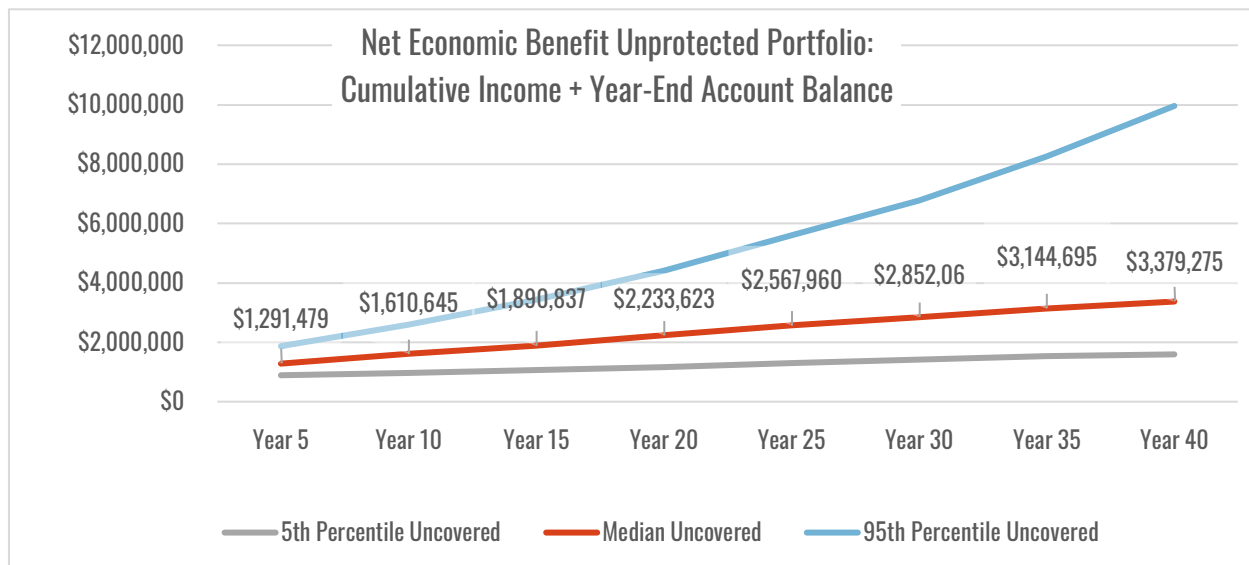
» First, like other rules of thumb, it is easy

to follow. The IRS stipulates withdrawal percentages based on life expectancy tables.

» Second, the RMD strategy allows the percentage of remaining wealth consumed each year to increase with age, as the retiree's remaining life expectancy decreases.

» Third, since consumption is not restricted to income, the household is less likely to chase dividends and is more likely to have a balanced portfolio.

» Fourth, consumption responds to fluctuations in the market value of the financial assets because the dollar amount of the drawdown is based on the portfolio's current market value."[4]

Influenced by the government's approach, John models spending using an RMD-inspired withdrawal calculator.[5] Modeling income in this dynamic way prevents Abe and Sasha's portfolio from running out of money, and allows John to produce more income, more reliably across more market scenarios, than

Figure 3. Net Economic Benefit after including RMD-Inspired Withdrawals

Net Economic Benefit Unprotected Portfolio: Cumulative Income + Year-End Account Balance

$1,291,479 $1,610,645 $1,890,837 $2,233,623 $2,567,960 $2,852,06 $3,144,695 $3,379,275

— 5th Percentile Uncovered   — Median Uncovered   — 95th Percentile Uncovered

he could when he strictly followed the "4% rule" in the prior example. John's strategy for Sasha and Abe is to withdraw the minimum of a) $40,000 per year, increasing 2% for inflation, or b) Account balance divided by life expectancy (this is how RMDs are calculated).

Using a spending approach that incorporates the best elements of the 4% rule and RMDs-on an uninsured retirement spending approach can reduce "failures" (scenarios in which the portfolio fully depletes, leaving no income available to be drawn), by adjusting income targets to account for actual portfolio performance. Furthermore, relative to the unadjusted "4% rule", this RMD-inspired withdrawal strategy produces more average income than does the "4% rule" alone. This strategy can, however, result in a degree of annual income variability in unfavorable market scenarios that is not tolerable to Sasha and Abe.

How a CDA can help provide more stable income

John now considers other options for how to reposition the portfolio to help safely generate the desired income, while maintaining the

opportunity to benefit from staying invested in the market over the long term. John examines adding a CDA to the portfolio to help protect lifetime income regardless of market circumstances. With this income protection for life in place, John feels comfortable recommending a more aggressive asset allocation for Sasha and Abe, with a 75% equity exposure.

John recommends and models single life coverage for Sasha since her life expectancy is greater than Abe's. Single life coverage offers higher payout rates than joint coverage, and since the covered asset is heritable, it would pass to Abe in the event that Sasha were to die before him.

John examines outcomes from implementing his preferred spending approach while simultaneously protecting 50% of the portfolio with a CDA. He finds he can provide both income stability and a material improvement in net economic benefit.
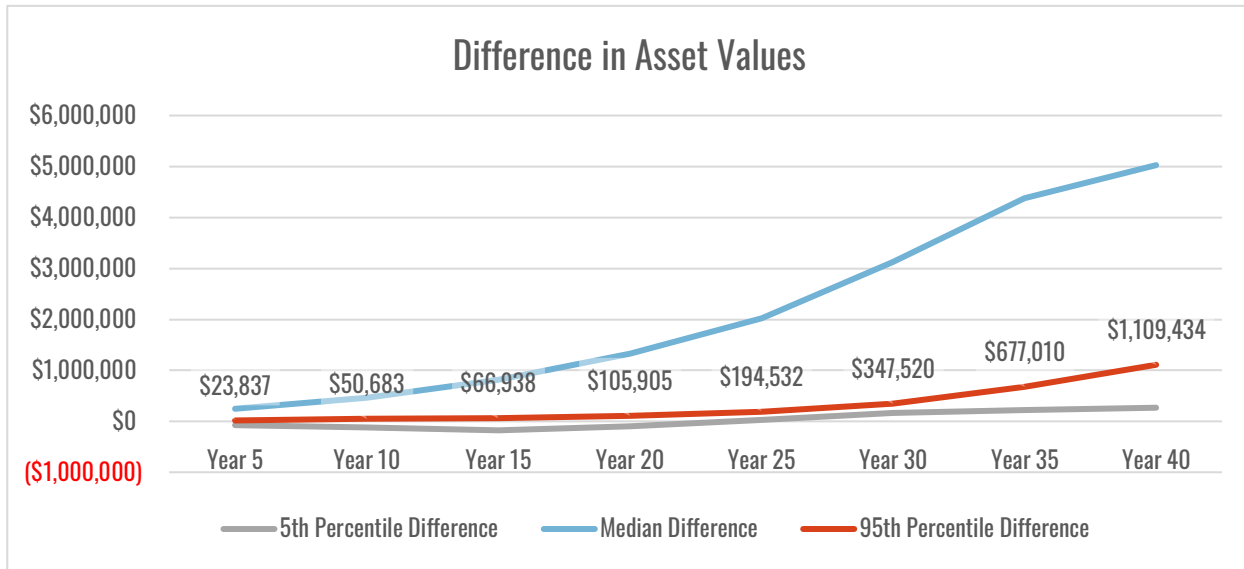
The yellow box in "Figure 5. Difference in net economic benefit (insured vs. uninsured), with 50% of portfolio covered" on page 8 highlights the age range during which portfolio income insurance may be most needed, and where there is a better than 50% chance that

Table 2. Difference in cumulative nominal income - RMD-inspired spending, insured portfolio vs. uninsured portfolio

Year	5th percentile	25th percentile	Median	75th percentile	95th percentile
5	($859)	($349)	$1,074	$3,834	$8,015
10	($8,527)	($4,024)	$7,378	$28,055	$59,809
15	($17,803)	($9,249)	$12,029	$51,080	$129,510
20	($42,085)	($25,288)	$23,612	$73,579	$201,373
25	($40,392)	($25,155)	$29,555	$101,993	$268,668
30	($41,779)	($19,941)	$38,758	$135,405	$374,441
35	$19,224	($4,992)	$70,542	$195,107	$453,333
40	$88,053	$44,365	$117,720	$274,612	$592,326

Figure 4. Asset Value Difference for 50% CDA-Covered Portfolio vs Uncovered using RMD-Inspired Withdrawal Approach

Difference in Asset Values

$23,837 $50,683 $66,938 $105,905 $194,532 $347,520 $677,010 $1,109,434

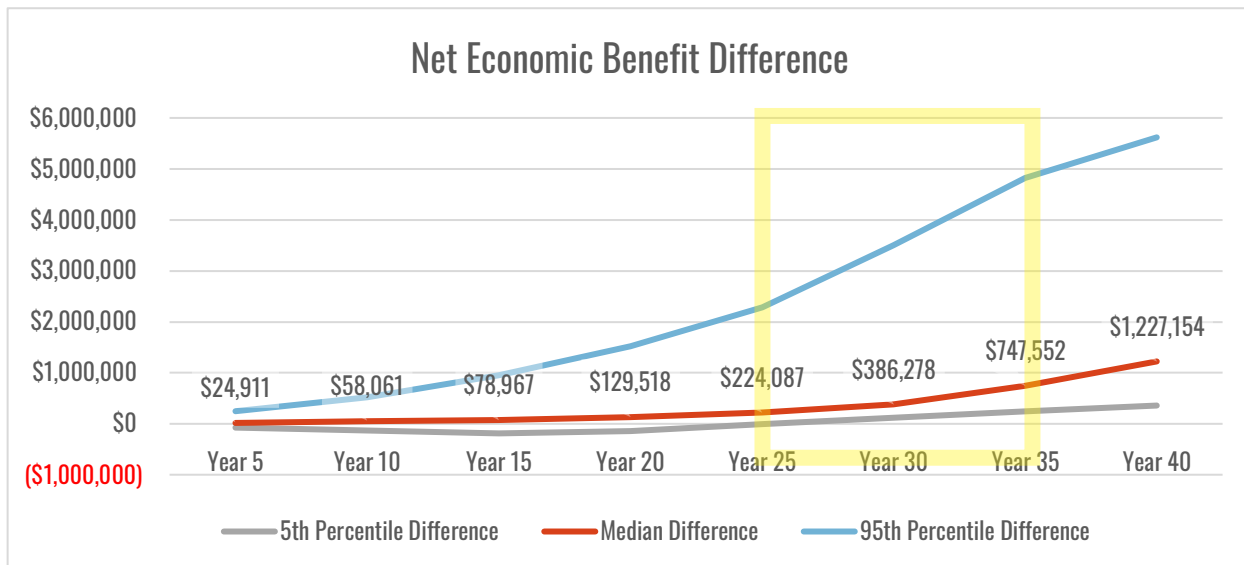— 5th Percentile Difference — Median Difference — 95th Percentile Difference

one or more members of a healthy 60 year-old couple will remain alive.

Important to the retirement lifestyle of Sasha and Abe is that, not only do they maintain a stable spending pattern, they also increase median accumulation of their portfolio by using the recommendations made by John. In year 30, for example, adding CDA coverage upon half of

the portfolio, leaving a blend of protected and residual value, added 26.9% to Sasha and Abe's median account balance, and 2.48% to their median annual withdrawal target.

The more aggressive equity allocation that John feels comfortable making with the income protection from CDA in place results, in the vast majority of scenarios, in enough incremental

Figure 5. Difference in net economic benefit (insured vs. uninsured), with 50% of portfolio covered

Net Economic Benefit Difference

$24,911 $58,061 $78,967 $129,518 $224,087 $386,278 $747,552 $1,227,154

— 5th Percentile Difference — Median Difference — 95th Percentile Difference

value-creation to offset the cost of adding the guarantee to the portfolio. Further, as time passes, John can gauge both how likely it is that Sasha and Abe's portfolio will deplete and when the portfolio performs well; as such, John may ultimately be able to drop CDA coverage, further providing advice value to them.

Conclusion

With a CDA, the consumer's up-front commitment is modest – an annual fee, collected quarterly in arrears, that is similar in magnitude to an advisory fee. This low commitment allows the client to make not a one-time, but rather a continuous decision to continue paying for an income guarantee, or to terminate the guarantee if it no longer proves valuable to them. The CDA allows the client and advisor to retain control of the allocation of assets, including equity exposure, and allows them to avoid the higher fees often associated with deferred annuities with secondary guarantees.

In the event of a poor sequence of returns, the contingent deferred annuity solves for longevity risk by providing a guaranteed income stream for life, even when the asset is exhausted. In the absence of a market shock early in retirement, this form of portfolio income insurance can

"This form of portfolio income insurance can also help create more predictable and stable income streams...than unprotected withdrawal strategies."

also help create more predictable and stable income streams, offer the opportunity to benefit from risk premium, and ultimately provide a better net economic benefit than unprotected withdrawal strategies.

Based on the above analysis comprising 1,000 Monte Carlo simulations, a portfolio with 50% of assets covered by a CDA offers significantly better outcomes in terms of Net Economic Benefit vs. an unprotected portfolio utilizing RMD-inspired withdrawal patterns.

And because the CDA results in payouts from the insurer only if (1) the portfolio underperforms, while (2) the insured lives, it can be viewed as providing higher lifetime income guarantee efficiency per premium dollar spent than do other annuity forms that have extraneous benefits and guarantees. This relative affordability for CDA as compared to immediate annuities, for example, is particularly pronounced in the currently rising interest rate environment.

The CDA constitutes a lean form of protection that makes payments only when the purchaser needs it most (which is when the portfolio needed to cover retirement expenses has been depleted). This makes the product's structure an important addition to the toolkit for RIAs to provide lifetime income protection to cover their clients' necessary retirement expenses.

Michelle Richter-Gordon, AIF® is Founder of MRG Advisors, LLC. She has twenty years of experience inventing, deploying, advocating for, and scaling innovative products (trademarkable IP) and programs (servicemarkable IP) that create a scalable intersection between the historically disparate worlds of Insurance and Financial Services.

Michelle earned a bachelor's degree in Economics from Wesleyan University, and an MBA in both Management and Finance from Columbia University's Graduate School of Business. Michelle is both an investment adviser and an insurance advisor, and she is neither an agent nor a currently registered representative.

1 MRG Advisors, LLC does not provide tax, legal or accounting advice. This material has been prepared for informational purposes only, and is not intended to provide, and should not be relied on for, tax, legal or accounting advice. You should consult your own tax, legal and accounting advisors before engaging in any transaction. No tax effects are modeled in this analysis.

2 Bengen, William H. (1994, October). Determining Withdrawal Rates using Historical Data. *Journal of Financial Planning*. (https://www.retailinvestor.org/pdf/Bengen1.pdf)

3 American Academy of Actuaries and Society of Actuaries. Actuaries Longevity Illustrator. Accessed November 14, 2022 from http://www.longevityillustrator.org/

4 Sun, Wei and Webb, Anthony. (2012, December). Retirement Withdrawals: Can You Base Them on RMDs? American Association of Individual Investors. Retrieved December 1, 2022 from https://www.aaii.com/journal/article/retirement-withdrawals-can-you-base-them-on-rmds

5 Data assumptions for this and all examples in this analysis include annual asset class returns sourced from from https://www.soa.org/resources/tables-calcs-tools/2022-research-airg/, accessed 4/22/23, with "US" index serving as proxy for equity returns and "LTCORP" as proxy for domestic fixed income returns. Assumed CDA charge of $8,000 annually (1.60% of initial covered premium) on CDA-covered assets. CDA coverage is dropped in model once portfolio value rises such that income need is under 2.5% of portfolio value. 1% advisor fee assumed upon all modeled AUM. CDA fees are deducted from the portion of the modeled accounts that is not covered by CDA. CDA benefit generates 5% on high water mark of covered amount (minimum in this example of $25,000 benefit annually on $500,000 of covered account value) deliverable once covered account value is depleted. Additional assumptions made available upon request.

6 According to an April 18, 2022 Morningstar survey of 2,344 non-group variable annuities, the industry average M&E fee is 1.29%. Source: https://www.schwab.com/annuities, accessed 8/3/22. A typical GLWB rider fee can range from 0.5 to 1 percent each year, source: https://www.annuity.org/annuities/riders/gmwb/, accessed 8/3/22. Thus the cost of an average VA-GLWB would range from 1.8%-2.29% annually.

RetireOne®