RETIREMENT INCOME INSTITUTE
Alliance for Lifetime Income

Who Should Read This Insight:
Retirement investors, financial professionals

Institute Research Agenda Topic:
Optimizing annuities in a retirement portfolio

Definitions of **bold key terms** are at the end of this article.

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Author and Title of the Article(s) Addressed in this Insight

Finke, Michael S., Wade D. Pfau, and Duncan Williams. 2012. "Spending Flexibility and Safe Withdrawal Rates." Journal of Financial Planning *25 (3): 44–51.*

Pfau, Wade D. 2013. "A Broader Framework for Determining an Efficient Frontier for Retirement Income." Journal of Financial Planning *26 (2): 44–51.*

Pfau, Wade D. 2017. "Retirement Income Showdown: Risk Pooling vs. Risk Premium." Journal of Financial Planning *30 (2): 40–51.*

Insight:
UNDERSTANDING WHY ANNUITIES WORK BETTER THAN BONDS IN A RETIREMENT INCOME PORTFOLIO

IDEAS IN THIS INSIGHT YOU CAN PUT INTO ACTION

The goal of this Insight is for retirees and their financial advisors to understand why bonds are the least efficient way to fund a spending goal in retirement. **Annuities** can replace bonds to support a retirement spending goal, and the three articles help to justify why this approach works and why it is okay to use a more aggressive asset allocation with remaining investments.

PRINCIPAL INSIGHTS

This series of articles, published over a span of five years, builds a case for how annuities can contribute to better retirement outcomes by replacing bonds in the retirement strategy. Retirement investors and financial professionals will observe a different perspective about annuities and how their inclusion in a retirement plan can more safely support greater retirement spending relative to investments-only strategies that rely on taking distributions from a portfolio of traditional asset classes like stocks and bonds.

The Role of Reliable Income

The first of these articles, "Spending Flexibility and Safe Withdrawal Rates," is wedded more to the traditional research about how to spend from an investment portfolio to cover retirement expenses, though it does describe how more reliable income outside of an investment portfolio, which annuities can provide, can impact the overall retirement income strategy.

The article made a distinction between "safe" withdrawal rates and "optimal" withdrawal rates from an investment portfolio as an essential piece of the retirement spending conversation. The previous discussion of spending from investments often focused on minimizing the chance that the portfolio empties and the retirees outlives their assets. The idea of a "safe" withdrawal rate is one that is low enough that such risk is kept to a minimal level.

But retirees could still choose higher withdrawal rates as a part of downplaying the potential impact of investment portfolio depletion. In particular, having other income sources from outside the retirement portfolio (such as Social Security, annuities, and pensions) can reduce the harm of those investment assets running out. This allows for a better assessment about balancing the trade-off between two competing goals: (1) wanting to spend and enjoy more while you are still alive and healthy, and (2) not wanting to deplete the investment portfolio and rely only on non-portfolio income sources in later retirement.

The article also discusses "spending flexibility" for the retirees in terms of their willingness to reduce spending at advanced ages, if necessary, when investments do not perform well. In

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practical terms, retirees who are less flexible with spending would like to smooth spending over retirement. These retirees are not overly interested in increasing spending if markets perform well, preferring instead to focus on keeping spending stable even if they end up living longer than expected and experience market downturns during their retirement.

The article finds that retirees with greater spending flexibility and more outside sources of income may be willing to accept higher risk for depleting their investments as a part of balancing the competing trade-offs. This willingness is manifested in two ways: (1) using a higher spending rate from investments, and (2) increasing the allocation to stocks and other risky assets within their investments. For the assumptions considered in the article, having moderate flexibility for spending as well as a larger base of protected lifetime income means being able to use a higher spending rate and more aggressive stock allocation with investments.

The Efficient Frontier

The next article in this series is “A Broader Framework for Determining an Efficient Frontier for Retirement Income.” This article brings the investment concept of an efficient frontier to retirement income planning. The efficient frontier is about how to position assets to balance competing trade-offs between risk and reward. For retirement income, risk is not being able to meet the retirement spending goal for as long as one lives, and reward is being able to leave behind an even larger legacy for heirs while also successfully meeting the lifetime spending goal.

The article provides a framework for retirees to choose how to allocate their retirement assets between stocks, bonds, and different types of annuities to balance these competing trade-offs. The efficient frontier tells you the allocations of stocks, bonds, and annuities, which support the highest reserves of financial assets on average while supporting a given level of spending.

One strategy is more efficient than another if it can do a better job at meeting these goals. Any of the allocations on the efficient frontier represent a potentially optimal point, and retirees can then choose which one they think best balances their own objectives. Any allocations not on the efficient frontier do a worse job than an allocation on the frontier when it comes to meeting these goals.

The punch line from the article is that retirees are best served by combinations of stocks and income annuities. Traditional asset allocations of only stocks and bonds tend to support the worst outcomes. This speaks to the notion of replacing bonds with annuities to get the most efficiency from retirement assets. Other types of **deferred annuities** may not be right on the efficient frontier, but they can also play a role for those who would like to preserve more liquidity and upside potential for their annuity assets.

This conclusion helps to strengthen the findings of the first article by justifying why it is the case that having more reliable income outside the investment portfolio helps to support a more aggressive strategy with the remaining portfolio. This helps to get the retiree closer to the efficient frontier for retirement income.

The Retirement Income Showdown

The final article in the series, “Retirement Income Showdown: Risk Premium vs. Risk Pooling,” further elaborates on the conclusions from the efficient frontier by providing a more direct contest in which the “risk pooling” of annuities competes with the “risk premium” of the stock market to fund retirement spending. These terms will be defined.

The article describes three basic ways that one could fund retirement spending. The starting point is bonds. One could purchase a series of bonds maturing each year as a way to fund

retirement expenses. Interest rates would determine the feasible amount of spending with this approach, as retirement spending is generated only by spending the accumulated assets plus the interest they generate. This is the base for spending, and there are two ways to potentially spend more.

The investments-only approach to fund retirement through systematic distributions from investments calls for an aggressive investment approach in the hope that stocks will outperform bonds and support a greater amount of overall spending in retirement. In addition to spending principal and interest or dividends, this strategy relies on the hoped and planned for capital gains from the stock market. This is the idea of the risk premium in which stocks compensate investors' risk by offering the potential for higher returns. There is no guarantee, but if higher returns are realized then more spending is possible.

The third approach is to use the risk pooling features of an annuity. With a simple income annuity, the insurance company invests the premium in its general account, which earns a bond-like return. This allows for the same spending sources as bonds. The "secret sauce" of the annuity, though, is to also provide a third source of contractually protected spending power through risk pooling. Those who end up not living as long, and who therefore do not require as many assets, help to support the spending of those who live longer, and therefore need more assets. This can help to raise the standard of living for everyone in the risk pool relative to bonds alone without placing faith in the idea that the stock market will outperform as needed to match the same spending.

Can the risk premium from the stock market provide sufficiently higher returns for a diversified investment portfolio to sustain the same spending level that is contractually protected by the annuity? Though not impossible, this research indicates that it may be harder than commonly appreciated for stocks to provide sufficient returns to keep pace with an annuity. Risk pooling is powerful. Those wanting a high probability of plan success and those who feel less comfortable with market volatility may find it very hard to accept an investments-only strategy as an alternative to partial annuity use. Risk pooling can provide a cheaper overall way to meet a spending goal (in terms of requiring fewer assets to meet the goal), leaving more assets to cover contingencies and support legacy, reaffirming the results of the efficient frontier.

Conclusion

Each of these three articles provides a unique twist on the role of an annuity in optimizing a retirement portfolio. The efficient frontier article suggests replacing bonds with annuities to support retirement income. The spending flexibility article demonstrates why this is realistic and feasible, as having a stronger base of reliable income can justify a more aggressive strategy for remaining investment assets. And the retirement income showdown article provides a greater demonstration about this by specifically testing the potential for the stock market to provide returns that can keep pace with the additional spending power supported through an annuity. It is difficult for an investments-only retirement income strategy to outperform a partial annuity strategy when seeking to meet retirement goals while managing the unique risks of retirement.

To learn more, visit the Retirement Income Institute at
www.allianceforlifetimeincome.org/retirement-income-institute

KEY TERMS ARE SOURCED FROM THE ALLIANCE FOR LIFETIME INCOME'S ANNUITIES LANGUAGE GLOSSARY AND INVESTOPEDIA

Annuity: *A financial product that can offer protected lifetime income and even potentially grow your money.*

Deferred annuity: *A type of annuity that delays payments until you choose to receive them, while providing an opportunity for growth or income during the deferral period.*

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