Sustainable Income in Retirement

Kamilla Svajgl, FSA MAAA

May 2016

The Retirement Landscape

The second decade of the 21st century represents a transformational period in the retirement savings industry due to demographic factors and market conditions. In January of 2011 the first Baby Boomer turned 65; in 2015 the first representatives of Generation X turned 50. While these are usually milestones that signify a lifetime of achievements and the approach of golden years, the retirement landscape that awaits retirees today is full of uncertainties. Elimination of defined benefit plans, increased healthcare costs, longer lifespans, the looming threat of inflation, and low investment yields on “safe” investments dominate the retirement landscape.

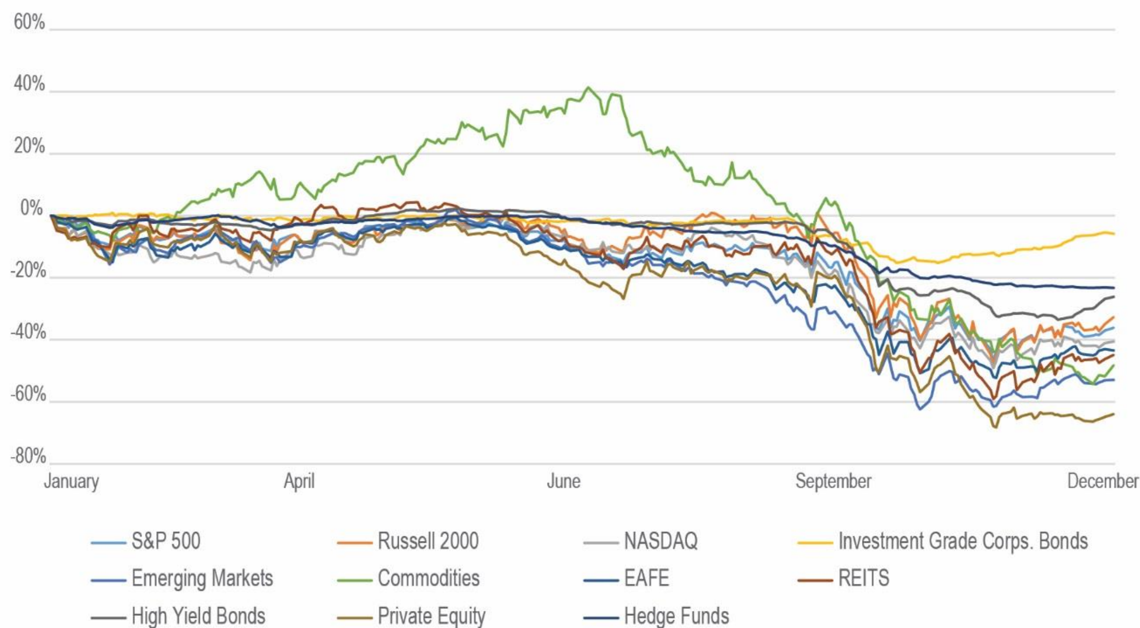
These factors are exacerbated by the fact that the typical American investor has not saved enough for retirement. Per the Federal Reserve’s Survey of Consumer Finances, the average working family entering retirement has $104,000 in retirement savings. Furthermore, the Center for Retirement Research at Boston College found that between 2010 and 2013, even as equity and housing markets were rebounding, the National Retirement Risk Index was essentially flat at 52%-53%. This abysmal performance was mainly driven by low interest rates and a higher “Full Retirement Age” which counterweighed the benefits of improved markets. The Center also estimated that as of 2010, half of American households would not have enough money for a secure retirement.

The natural conclusion, therefore, is that investors must concentrate on shoring up their retirement savings accounts to avoid running out of money. Shoring up their investments, however, can be easier said than done, considering that “safe” investments—namely fixed income—do not provide yields needed to increase their nest egg. Per the Dalbar report, “the average fixed income investor has failed to keep up with inflation in 9 out of 14 years”.

Problem 1: Traditional Risk Mitigation and Failure of Diversification

Today many investors at or nearing retirement find themselves between a rock and a hard place: they realize they cannot afford to take on the risk of equity exposure, while also recognizing they cannot afford not to take on that same risk. As a common response to this dilemma, many investors have turned to traditional balanced portfolios with a significant equity allocation. Having equity exposure is not a prohibitive endeavor, per se. In fact, equities share a generally positive relationship with inflation and can be an efficient vehicle against it. Additionally, equities have yielded attractive returns when invested over long periods of time. However, during market downturns, even a balanced portfolio will exhibit significant losses if diversification fails. In 2011 Putnam reported, “twenty years ago, the

average correlation of asset classes in the typical pension plan was 25%. Now, the average correlation of those same asset classes is 70%". The graph below highlights the in-tandem decline in asset classes in late 2008:



Bloomberg, Milliman Financial Risk Management LLC

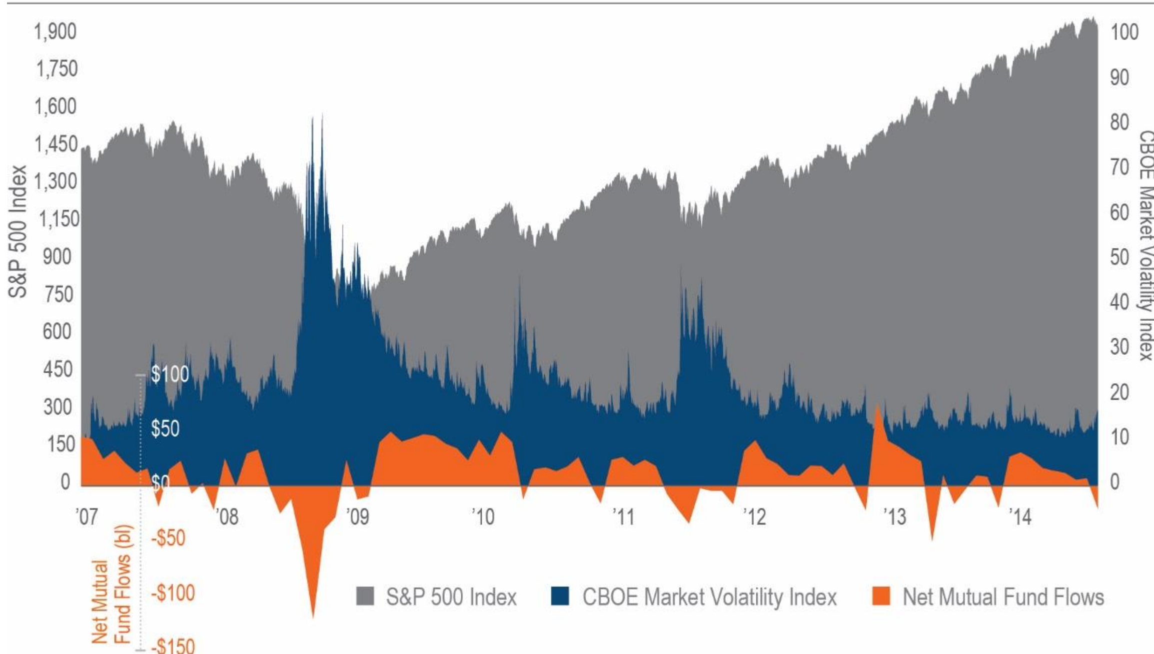
On the other hand, during stable and upward moving markets, an allocation to bonds will reduce a retirement account's upside potential. Given the widespread shortfall in retirement savings, failing to maintain a significant level of equity exposure to capture the benefit of rising markets is a luxury most investors cannot afford.

In this traditional approach, allocations to fixed income are being used as a risk-management tool to reduce the total volatility of the portfolio, resulting in a zero sum game between too much risk and a lack of growth.

Problem 2: Investor Behavior

Eight years removed from the peak of the Financial Crisis, many investors have become plagued with complacency as they maintain unrealistic expectations of investment returns. Their investment objective is frequently dominated by short-term market performance, rather than a long-term sustainable income. Traditional investment vehicles combined with irrational investor behavior and the lack of any type of protection or guarantee could be a toxic mix for millions of American families.

The graph below shows that when confronted with an increase in market volatility, investors tend to exit the market at the least opportune times and miss out on the subsequent market run up. Dalbar estimates that psychological factors account for 45% to 55% of the chronic investment shortfall.



Source: Milliman Financial Risk Management LLC, 1/31/07 - 9/30/14.

Performance shown is for illustrative purposes only, is historical and is not reflective of any actual investment. Past performance is not a guarantee of future results. It is not possible to invest directly in an index. This data is gathered from the Investment Company Institute (ici.org), as of the date above. There is no guarantee that any investment or strategy will achieve its objectives, generate positive returns, or avoid losses.

Solution: Innovation and Transformation of the Insurance Industry

While irrational investor behavior exacerbates an already problematic retirement landscape, there is another way to address the problem. Rather than taking an "either/or" mindset (i.e., take the equity risk and hope for the best, or don't take it and earn insufficient returns), I believe investors do well to take a "both/and" approach. Such options often do not exist in today's retirement plans, and there is an opening for the insurance industry to play a central role in transforming the retirement landscape to allow for sustainable income in retirement. The framework outlined below is geared specifically for the retirement-oriented investor, and is well-suited for the insurance industry and its expertise.

Managed Risk Funds and Deferred Income Annuity

In the early 2000's, after the burst of the tech bubble, the life insurance industry in the United States adopted sophisticated risk management strategies to mitigate market risks on the balance sheets of insurance companies. By 2008, it was difficult to find an insurance company that didn't hedge its market exposure by using derivatives. By making that leap, they joined the ranks of universities, foundations, pension plans and even farmers who have been using derivatives for decades to manage their risks and protect their financial stability.

In the aftermath of the Global Financial Crisis, it became increasingly apparent that this type of risk management could also exist directly within funds, and a new generation of risk-management was born: managed risk equity. Managed risk equity funds are a new type of investment vehicle where a risk management sleeve is overlaid on the equity portfolio within a fund or a subaccount. Life insurance companies have embraced risk managed equity funds because they address the fundamental problem of the zero-sum game described above and mitigate the negative impact of policyholder behavior.

In fact, in its paper "The 6% Rule", Milliman shows that managed risk equities increase the sustainable withdrawal rate from the industry norm of 4% to a higher 6% rate, with a 94% probability of success over a 27-year planning horizon. This significantly improves the expected outcome in retirement and provides more sustainable income. However, there is still one question left unanswered: what about longevity risk? The answer to the longevity risk resides in one of the core offerings of the life insurance industry: a Deferred Income Annuity (DIA). In the new framework, DIA and managed risk equities would comprise two components of a retirement plan. The illustration below is taken from Milliman's "The 6% Rule" paper. It uses an example of a 65-year old investor who spends 21% of his initial portfolio to buy a DIA that will start at the age of 80. Based on the analysis, even after spending a fifth of his initial retirement savings portfolio on the DIA, the investor still maintains the withdrawal rate of 6%. This higher withdrawal rate is possible since the remaining portfolio will only need to last 15 years, till the age of 80, as opposed to 27 years, till the age of 92.

65 Year Old Retiree	100% Managed Risk Equities	100% Managed Risk Equities with DIA
Sustainable Withdrawal Rate	6%	6.10%
Planning Horizon	27 years	Lifetime
Age at Portfolio Depletion	92	80
% of Portfolio for DIA	0%	21%
Probability of Success	94%	94%

This framework of combining an equity portfolio, a hedge overlay protecting the equity portfolio, and a DIA creates a solution where a managed risk approach is used to generate sustainable income for a pre-set number of years, after which the DIA continues to provide income for the remaining life of the policy holder.

Conclusion

The life insurance industry has adopted and continues to embrace the managed risk approach. According to Soleares' March 30, 2016 report, managed risk equity in the variable fund universe amounted to "211 active portfolios with $242 billion in assets at the end of 2015, an 11% increase" over the previous year. Life insurance companies are well positioned to expand the use of managed risk equity outside of variable annuity guarantees. Similarly, the DIA is one of the core products of life insurance companies and they are well versed in creating and distributing these products. There is no better candidate than the life insurance industry to combine these two products and become an integral part of the retirement solution by creating an offering that addresses both market and longevity risks.