12.15 ISSUE BRIEF

How to formulate a retirement spending plan

By Luke Delorme, Research Fellow

Our step-by-step strategy is research-based and helps you plan

As you approach retirement, you'll likely spend countless hours thinking about how and where to invest after you stop working. Should you get more conservative with your investments? What amount of risk can you tolerate at this stage of life? Should you buy an annuity? These are all important questions about how to finance retirement, but they ignore a critical component of success: How should you withdraw your money from savings?

For workers who will rely on savings for most retirement income, crafting an appropriate spending strategy will overwhelmingly determine their success. For example, consider a strategy that cuts spending (withdrawals) from an annual amount equal to 5 percent of the original portfolio to 4 percent. This spending reduction could markedly reduce the probability of running out of money during retirement—by as much as 20 percentage points.

In contrast, a recent AIER research brief and several papers by other researchers have debated the merits of various asset allocation strategies during retirement. Our analysis found that, under certain circumstances, retirees could decrease the probability of running out of money during retirement by a relative modest amount—2 to 4 percentage points—by enacting a strategic "rising equity glide path" that increases exposure to stocks over the course of retirement (https://www.aier.org/research/case-increasing-stock-exposure-retirement).

How much you spend from your retirement savings from year to year is arguably the most important piece in the retirement finance puzzle. A simple strategy of spending moderately less during retirement is far more effective than a complicated asset allocation framework.

This research brief offers a starting point for older workers wondering how they should think about withdrawing from savings in order to finance a secure retirement. We are not assuming what is best for you. Rather, we're offering information you need and questions you should ask yourself to design an appropriate strategy. Based on your preferences and household characteristics, an appropriate retirement withdrawal strategy will follow.

Before you begin: Control what you can

Before developing your spending strategy, you should understand an important overarching philosophy: You can't control financial market fluctuations. You can only control how much you spend and how to adapt. When you stay invested during retirement, there will be times when market volatility makes it feel like you've lost control. Maintaining a plan can help rein in this feeling. Controlling emotions is a critical component of successful investing.

You may think that the market will tank because China's economy is slowing, or that gold will skyrocket in value because inflation is due for a spike, or that bond yields have nowhere to go but up, but the market doesn't care what you think. You might be right, and you might be wrong. A prepared investor will plan for multiple scenarios. Of course, preparing for huge increases in returns is not difficult. It's preparing for years of languishing markets that presents a problem for most investors.

At the end of the day, you have to admit that Lady Luck plays a colossal role in how well your investments perform. Consider the fate of two investors who retired

just 10 years apart, one in January 1965 and the other in January 1975. Let's say that they both had $1 million in savings and spent $50,000 per year, adjusting for inflation. They both maintained passive portfolios composed of 50 percent stocks and 50 percent U.S. Treasurys, rebalanced monthly (we'll assume no taxes or fees for this example). Take a look in Chart 1 at how their portfolios would have performed over the course of 20 years.

Did the 1975 retiree do anything particularly clever that led to his superior outcome? Did the 1965 retiree do anything particularly stupid? The answer to both questions is no. Even a very clever allocation would not have allowed the 1965 retiree to spend at this level, whereas even a conservative allocation would have allowed the 1975 retiree to thrive. The difference is just when they retired and the returns and inflation that happened in the years after.

Again, you can't control what the market does. The following steps in this brief can help you think about developing a process and a plan for how you will react, or not react, to market fluctuations during retirement.

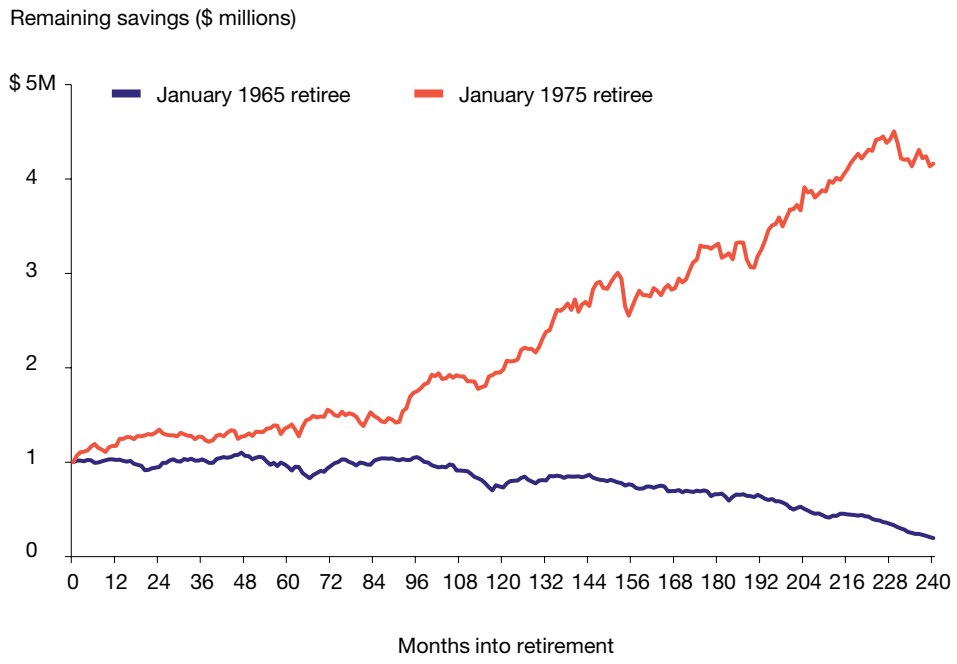
Step 1: Establish your baseline

The first step in determining an appropriate retirement spending strategy is to know yourself and what you can tolerate. We present two big decisions that will help you initiate an appropriate strategy:

1. Safe or optimal: Do you prefer safe spending, with a minimal likelihood of your money running out over the course of 30, 35, or 40 years? Or do you prefer optimized spending, with a higher likelihood of exhausting the portfolio, but it will be spent efficiently and you will be less likely to under-spend?
2. Constant or variable: Do you need to have a steady and constant income over the course of retirement, or are you comfortable with variable income?

Depending on your responses to these questions, you can start to think about the design of your spending strategy. For a safe and constant dollar strategy, the traditional "4 percent rule" applies. This means that you are looking for a constant-dollar (inflation-adjusted) amount—calculated as 4 percent of the original balance—that you can spend annually with a minimal likelihood that your portfolio will run out in less than 30 or 35 years. The 4 percent rule is often misunderstood. The

Chart 1. The 1975 retiree was luckier than the 1965 retiree.



Source: Author's calculations based on CRSP 1-10 Deciles Stock Index and 5-year U.S. Treasury returns.

4 percent rule of thumb estimates at the outset of retirement a constant dollar amount that you can spend every year. It does not mean that you spend 4 percent of what is left every year.

On the other hand, for an optimal strategy with variable income, an increasing percentage withdrawal—such as an amount equal to the Internal Revenue Service's required minimum distribution (RMD)—will create a more optimal pattern of retirement income. You may have to reduce your annual spending during periods of poor market returns, but this may allow you to withdraw a little more if returns are good.

Where other studies fall short is assuming a particular withdrawal strategy is right for you. While a variable withdrawal strategy may be considered more optimal from an economic standpoint because it is more efficient, there are retirees who assign great importance to having stable, constant income during retirement.

By not imposing a withdrawal design, or foundation, we are allowing you to choose the best plan to suit your preferences. This is the first step in developing a strategy that will support you throughout your retirement.

As a baseline, we suggest two potential starting points, shown in Table 1. For more depth on the baseline suggestion and how these strategies are modeled, please refer to "A Blueprint for Retirement Spending," Journal of Financial Planning, September 2015.

Step 2: Evaluate your planning horizon

This is where most research stops. It provides a baseline withdrawal guideline for a "typical" household. Practitioner Bill Bengen's groundbreaking 1994 research established a 4 percent rule. Based on historical data, he found that households could spend a constant annual amount (inflation-adjusted) equal to 4 percent of the original balance, and the portfolio would last at least 30 years. We believe that most households are not preparing for exactly this scenario. For instance, what if the household needs to plan for only 20 years, or what if it needs to plan for 40?

Our first adjustment takes into account what affects your planning horizon. Our baseline strategy from Table 1 was based on the average life expectancy for married male-female couples retiring at age 65. If you plan on retiring earlier, you should plan on a longer horizon. If you are a single man, you can generally reduce the horizon because you have a shorter life expectancy than a woman or a married man. If you have better health than average, perhaps you should consider lengthening your planning horizon. All this adds up to the relatively simple notion of reducing spending for longer planned retirements or increasing spending for shorter retirements. For example, Chart 2 shows how the maximum safe constant dollar percentage changes based on the planning horizon.

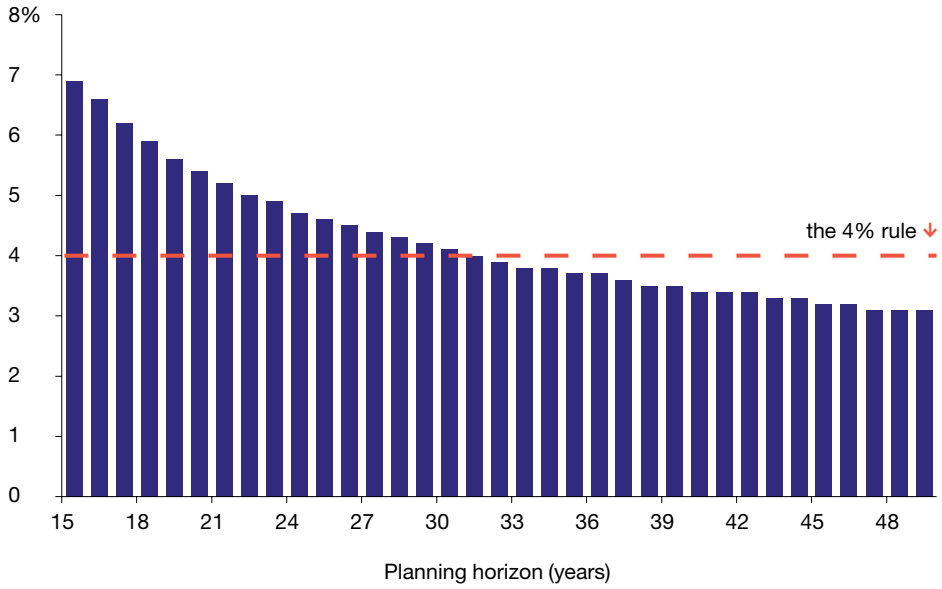
For optimal and flexible withdrawals, the planning horizon adjustment may be slightly different than for constant-dollar withdrawals, but the general idea is the same. Explicit guidelines can be found in our summary table at the end of this brief.

Table 1. Spending preferences and withdrawal strategies

	Safe	Optimal
Constant dollar	3.8% of initial balance	5.4% of initial balance
Flexible	3.5% of remaining balance until age 70; RMD thereafter	5.6% of remaining balance until age 70; RMD + 2% thereafter

Note: RMD = required minimum distribution, IRS.

Chart 2. Maximum safe withdrawal percentage



Note: 95 percent success rate.

Source: "A Blueprint for Retirement Spending," Luke F. Delorme, Journal of Financial Planning (September 2015).

Step 3: Think about other income

The economic research literature shows that households with higher guaranteed income, such as Social Security, employer pensions, annuities, or other income, should consider riskier withdrawals than households without high guaranteed income. The theory is that when you incorporate all the sources of income into the household balance sheet, the income from savings becomes relatively less important. Since this other income tends to be safer because it is guaranteed in one way or another, it may make sense to take more risk with income from savings. This could mean higher planned withdrawals or a more aggressive allocation to stocks.

If you prefer safe income first (step 1), you may not be convinced by this logic, and that is OK. We do not propose an adjustment to withdrawals if you are a safety-first retiree. However, if you are a utility maximizer and you are seeking optimal income, higher guaranteed income may encourage you to spend from savings at a higher rate. Depending on the relative amount of guaranteed income compared with savings, this could mean withdrawing up to an additional 2 percentage points per year.

Finally, at extremely high levels of guaranteed income relative to savings, it may make sense to scrap systematic withdrawals altogether and consider another plan. See our January issue brief, "Rethinking Retirement Guidelines," for more thoughts on this scenario (https://www.aier.org/research/rethinking-retirement-guidelines).

Step 4: Make adjustments

Our research offers four other important adjustments that should be considered when planning for retirement spending: return assumptions, equity exposure, investment management fees, and bequest motive.

First, we looked at the return assumptions built into retirement planning models. Not surprisingly, assumptions about returns are an outsize driver of results. Compared with our baseline assumptions, we found a range of reasonable return assumptions that could reduce the proposed annual spending guideline by as much as one percentage point, regardless of the foundation you've selected.

Next, we looked at how equity exposure should affect withdrawal plans. Although it may be wise to coordinate allocation and spending strategies, how much to allocate toward risky assets such as stocks is an independent decision. Generally speaking, for safe withdrawals, no adjustment needs to be made for stock allocations between 30 percent and 60 percent. Although the outcomes are varied across these allocations, the results depend on return assumptions, and it is unclear whether a higher or lower constant-dollar amount should be used.

For optimized withdrawals, however, a higher allocation to equities suggests that spending can be increased. We offer a guideline that for each additional 10 percent allocation to equities above 50 percent of the portfolio, an optimized spending strategy will increase by 0.2 percentage points. The reverse is true as well for portfolios that allocate less than 50 percent to equities.

The math is fairly simple for the final two adjustments. First, you should consider reducing your spending by your total annual investment management fees. This can be sizable, especially if you are still investing with a high-cost investment adviser, paying for actively managed funds, or trading too frequently.

Finally, many people have a strong incentive to leave a bequest to their heirs. Most research assumes this desire does not exist. If you maintain such a motive, you should reduce your spending in order to increase the likelihood of a generous bequest.

Final thoughts

We have laid out a simple framework for developing a retirement spending strategy. Broadly, we hope this analysis enables you to start thinking about how you'll spend from savings in retirement. More specifically, we hope this might offer explicit guidance on how much to spend during those first few critical years. Our summary of appropriate strategies based on preferences, characteristics, and adjustments can be found in Table 2. We also offer a simple, safe constant-dollar calculator at www.aier.org/retirement-withdrawal-calculator. We hope this research can help you and your family to formulate a suitable retirement spending plan.

Table 2. Summary of strategies

	Baseline preferences and strategies			
	Safe and constant	Safe and flexible	Optimal and constant	Optimal and flexible
	Constant dollar	RMD	Constant dollar	RMD plus
Baseline spending amount	3.8% of initial balance	3.5% of remaining balance until age 70; RMD thereafter	5.4% of initial balance	5.6% of remaining balance until age 70; RMD + 2.7% thereafter
Adjustment for planning horizon	+/- 0.1% for each year above or below 34 years in the planning horizon	If you retire before 65, reduce spending by 0.1% for each year of early retirement. After 70, revert to RMD.	Married couples can add 0.1% for each year retirement is delayed past age 65. For singles, consider even higher withdrawals.	Married couples can add 0.2% for each year retirement is delayed past age 65. For singles, consider even higher withdrawals.
Adjustment for pensions	No change	No change	Add up to 2% depending on amount of pension.	Add up to 2% depending on amount of pension.
Adjustment for return assumptions		Subtract up to 1% for alternative return assumptions.		
Adjustment for equity exposure	No change for equity allocations of 30–60%	No change for equity allocations of 30–60%	+/- 0.2% for each 10 percentage-point increment above or below 50% equities	+/- 0.2% for each 10 percentage-point increment above or below 50% equities
Adjustment for fees and bequest motive	Reduce spending by total amount of fees. Further reduce for bequest motive.			

Notes: RMD = required minimum distribution, IRS. Baseline: Male-female married couple age 65 (youngest spouse) with no pension, no fees, and 50/50 stocks/bonds.

Source: "A Retirement Spending Blueprint," Luke F. Delorme, Journal of Financial Planning (September 2015).

Plan your own strategy

The online AIER Retirement Planning Calculator will help you plan your own retirement withdrawal strategy.

Go to
https://www.aier.org/retirement-withdrawal-calculator

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