

## Partnership - We work with our clients to create a roadmap to stay on course.

## A roadmap to retirement

Retirement forecasting models have been used over the years to help individuals and families plan for their retirement goals. Some models predict outcomes based on straight-line performance figures ( $5 \%$ annual growth as an example), and some models predict based on the up and down market activity of an index (such as the S\&P 500). One drawback to using these models is it can be hard to interpret the data because context about major assumptions used to calculate the final numbers are not provided.

Your portfolio's "sensitivity" is a term used to illustrate all the variables some you can control, some you cannot - that contribute to your ability to fund your retirement income needs. Let's take a quick look at the three categories of retirement sensitivities:

- Things you control - Among the sensitivities you can typically control are your annual savings rate, your retirement age and your retirement lifestyle expenses.
- Things hard to control - The sensitivities which you may not have

|  | Things you control |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Base case | Base case | Annual <br> savings higher | Retirement age higher (work longer) | Lifestyle expenses lower (less) |
| Age 55 |  | \$30,000 | 68 | \$90,000 |
| Assets \$1.6M |  |  |  |  |
| Annual savings \$20,000 |  |  |  |  |
| Retirement age 66 |  |  |  |  |
| Return rate 6\% |  |  | \$1,310,000 | \$1,330,000 |
| Retirement lifestyle expense $\$ \mathbf{1 0 0 , 0 0 0}$ |  |  |  |  |
| Income tax rate 25\% |  | \$640,000 |  |  |
| Inflation rate 3\% |  |  |  |  |
| Life expectancy 95 | \$120,000 |  |  |  |
|  |  | sible asse | life expectancy |  |

## Total assets available at life expectancy*

much control over include your investments' return rate and your personal income tax rate. You have some control over your investment performance, in the sense that the more aggressively you invest, the higher your returns are likely to be - although, on the flip side, you'll be taking on greater risk and incurring more volatility. As for your personal income tax rate, you may have control over it only by virtue of when you start Social Security or when and how much you take from IRAs and qualified plans.

- Things very hard to control - Chief among these sensitivities is your life expectancy. Of course, by taking good care of yourself throughout your life - exercising, eating right, not smoking, etc. - you may be able to affect your longevity, but only to a certain extent because other factors, such as your family history and the possibility of contracting a serious disease, will also enter the equation.
Depending on how you adjust sensitivities in your portfolio, you can achieve vastly different results. And once you know what sensitivities you need to modify, you'll find it easier to make those long-term investment decisions that give you the best chance to develop a retirement income plan that's appropriate for your needs.

What's important to understand is that, by changing just one of these sensitivities, you can drastically affect the amount of assets you have available during your retirement years. Consider the following example:

With all other factors being equal, at the end of your life expectancy, you would have $\$ 2,660,000$ with $2 \%$ inflation annually compared to negative $\$ 3,460,000$ with $4 \%$ inflation annually.

This illustration just shows one possible outcome. When you take into account all the variables - savings rate, retirement age, lifestyle expenses, investment return rate, income tax bracket, inflation rate and life expectancy - and start adjusting these sensitivities in relation to each other, you can evaluate outcomes, in terms of your available retirement resources.

By studying the sensitivities carefully, and making the right adjustments in response to changing circumstances in your life, your financial advisor can help you stay on track toward the type of retirement you've worked so hard for.


- \$3,460,000


## 2\% Inflation 4\% Inflation

*Illustration assumptions:

- Current age: 55
- Current assets: $\$ 1,600,000$ (divided equally between qualified funds (401(k), IRA) and non-qualified funds (savings, non-tax-deferred investments)
- Annual Social Security income: \$18,000 (\$12,000 for one spouse; \$6,000 for another)
- Annual savings until retirement: \$20,000
- Retirement age: 66
- Annual retirement lifestyle expense $\$ 100,000$
- Investment return rate: 6\%
- Income tax rate: 25\%
- Inflation: 3\%
- Life expectancy: 95

