How to optimize retirement income
Financial advice often focuses on boosting personal savings rates and maximizing return on investment during a worker’s accumulation years.

Equally important, however, is the decumulation process, when people spend those savings in the form of income.
The goal is to optimize that income — allowing for smooth consumption over time and, importantly, ensuring the money doesn’t run out. But the question of how to do that isn’t easy to answer. This has become even more challenging as Americans are living longer, yet the average retirement age is largely unchanged.¹

That’s why BlackRock worked with the Bipartisan Policy Center (BPC) to lift the veil on how individuals can optimize retirement income. We leveraged BlackRock’s proprietary life cycle model, combined with BPC’s expertise in policy and behavioral finance, to build an income optimization framework.

Our analysis demonstrates through an illustrative case study how taking a holistic approach to retirement income benefits savers. In particular, a few steps — adding guaranteed income, adjusting asset allocation over time and delaying Social Security claims — can potentially generate more retirement income and decrease risk:

**Adding guaranteed lifetime income combined with a more aggressive asset allocation generates 29% more annual spending ability from one’s retirement savings (excluding Social Security) and reduces downside risk by 33%).²**

**On top of that, delaying retirement and claiming Social Security benefits from 65 to 67 boosts total annual spending another 16% and reduces downside risk by an additional 15%.**

**The increased spending generated by these strategies extends well beyond the average life span, providing a significantly higher spending floor into a retiree’s 90s and beyond.**

Ultimately, savers and retirees must treat retirement as a phase of life, not a destination, and develop a retirement income toolkit made up of potential income sources and strategies that could be employed to diversify and increase retirement income.

Not all Americans, however, have access to the same opportunities and tools. Policymakers have an important role to play by collaborating with the private sector to advance broad and equitable financial security. Key to these efforts is the need to provide greater education and tools to support individuals through the accumulation and decumulation phases of retirement.


2 When compared to a standard retirement portfolio of 60% fixed income and 40% equities. There are many ways to measure downside risk; for simplicity, this analysis uses the worst 5% of spending outcomes (i.e., the saver has a 95% chance of spending at least this much over the first 15 years) as a benchmark. We use undiscounted spending in real dollars.
A lifetime of financial decisions

Every retiree’s financial situation is unique — the product of an entire life’s worth of decisions and other factors, including:

<table>
<thead>
<tr>
<th>Lifetime earnings</th>
<th>Savings rate</th>
<th>Career length</th>
<th>Hours worked in old age</th>
<th>Investment strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market performance</td>
<td>Inflation</td>
<td>Home equity</td>
<td>Social Security claiming date</td>
<td>Taxes</td>
</tr>
<tr>
<td>Caregiving responsibilities</td>
<td>Health</td>
<td>Longevity</td>
<td>Gender and race</td>
<td>Education</td>
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<td>Financial literacy</td>
<td>Behavioral biases</td>
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Optimizing retirement income requires taking a holistic view. Rather than considering retirement assets, home equity, Social Security benefits and other savings and assets separately, savers and retirees need help developing strategies that incorporate these as dynamic components of a single portfolio. The following steps can serve as a starting point:

**Steps for savers**

1. **Determine retirement objectives**
   
   Many savers (or even retirees) cannot articulate what financial success in retirement looks like for them. Without clarity around retirement objectives, understanding the challenges one must surmount and creating a plan to overcome them is virtually impossible. Each saver’s goal will depend on their circumstances and preferences.

2. **Consider key risk factors**
   
   All retirees must address the risk of outliving their assets, but savers face a wide variety of risk factors throughout their lives. Academic research and surveys with retirement participants consistently show that these risk factors often correspond to three broad phases of the retirement planning journey. During the early-career years, low earnings — and therefore low ability to save and invest — often poses the greatest challenge. As savers near retirement, market volatility comes to the fore. Finally, retirees often struggle to spend sustainably from their portfolios.

3. **Formulate a holistic strategy**
   
   Optimizing income in retirement requires considering career earnings as well as income from Social Security, part-time work in retirement and other sources, in tandem with the key risk factors that change over time. BlackRock has put forward a set of decumulation principles — maximizing spending ability, maximizing spending certainty and addressing longevity risk — that provides a foundation on which savers can build their own specific goals and help their decision-making.

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A holistic approach in action

To analyze the impact of using different combinations of tools available to retirees, we created a case study for a saver. Aware that their savings balance alone cannot guarantee a stable retirement, the saver is seeking to improve the success of the decumulation phase of their retirement journey. The 35-year-old saver has an annual income of $44,000, a 5% savings rate and a current retirement account balance of $19,000.5

We then ran 100,000 simulations reflecting various economic conditions, such as investment returns, annuity prices, inflation rates and labor earnings. For each simulation, we projected asset class returns and annuity prices by year starting at age 35. Next, we analyzed the impact of deploying three retirement strategies: a base case and two enhanced strategies, each of which builds on the prior.

### A decumulation case study

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Decumulation period asset allocation</th>
<th>Guaranteed income product?</th>
<th>Age of Social Security claiming &amp; retirement</th>
<th>Portfolio strategy details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base case</td>
<td>Equity 40% Fixed income 60% No</td>
<td></td>
<td>65</td>
<td>Asset allocation de-risks from age 35 to retirement, shifting away from equities.</td>
</tr>
<tr>
<td>Strategy 1:</td>
<td>50% 50% Yes 65</td>
<td></td>
<td>Saver gradually purchases a series of deferred annuities from age 55 to retirement at 65.7 Upon retirement, the deferred annuities (which have an estimated value representing 30% of the saver’s account balance) commence paying guaranteed income.8 Saver changes asset allocation from 40% equity to 50% equity at retirement in light of the additional security provided by the guaranteed income.</td>
<td></td>
</tr>
<tr>
<td>Strategy 2:</td>
<td>50% 50% Yes 67</td>
<td></td>
<td>In addition to the changes above, saver delays retiring and claiming Social Security benefits from age 65 to age 67. Accordingly, the deferred annuities commence income payments at 67.</td>
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</table>

5 These inputs roughly represent a typical 35-year-old U.S. worker, per data from the Employee Benefit Research Institute and the Census Bureau. The trends shown later in this analysis generally hold under a variety of reasonable assumptions. Because defined contribution (DC) plan participants, on average, out-earn the average U.S. worker, they will receive a relatively greater benefit from a guaranteed income product (and relatively less from higher Social Security benefits) than the average worker.6 Assumptions based on BlackRock’s standard life cycle model.7 We calculate the value of the modeled deferred annuities using a proprietary BlackRock annuity pricing model, which considers actuarial and capital market assumptions. Fees are not included in the modeling.8 Incorporating guaranteed income could be implemented in other ways. This method reduces the point-in-time risk by purchasing the annuities over time. When assessing the overall benefits of Strategy 1, the implementation method used is less important than the actual incorporation of guaranteed income (i.e., the demonstrated increase in mean spending still holds regardless of what implementation approach is used).
The **Base Case** represents a typical U.S. retiree who begins claiming Social Security benefits at age 65 and has 40% of assets in equities and 60% in fixed income (such as bonds).

**Strategy 1** first adds a guaranteed lifetime income product, in the form of deferred annuities purchased over time, to their retirement strategy. Then, Strategy 1 adjusts the asset allocation in retirement to reflect a holistic approach. Having a portion of their future income needs fully guaranteed by annuities frees up the retiree to increase their equity allocation from 40% to 50%. Nonetheless, overall retirement income risk remains relatively neutral, as the 50% equity allocation is applied to only 70% of total assets (due to the 30% allocation to the annuities).

**Strategy 2** builds on Strategy 1 by delaying the age at which our individual retires and claims Social Security benefits from 65 to 67. (Social Security’s full retirement age is 67 for beneficiaries born in 1960 or later.) For those able to use this strategy, delaying retirement and benefit claiming serves triple duty: It can simultaneously increase the size of one’s nest egg at the time of retirement (by enabling additional years of saving), shorten the decumulation period and increase the size of the monthly Social Security benefit. Among all retirement decisions, the choice of when to retire and claim Social Security often has the single greatest impact on one’s financial security.

Consider how the Base Case and the two additional strategies fare when applied against the decumulation principles (see “Steps for savers” on page 4).

**Spending ability:** In general, both strategies progressively increase potential spending. Incorporating guaranteed lifetime income as described in Strategy 1 increases average annual spending from savings alone (excluding Social Security) by 29% throughout retirement.

**Spending certainty:** Both strategies generally reduce downside risk over the Base Case. Adding guaranteed lifetime income as described in Strategy 1 decreases downside risk by 33% when evaluating cumulative spending from retirement savings alone (excluding Social Security) at the fifth percentile of modeled outcomes over the first 15 years of retirement.

**Longevity risk:** The increased spending extends well beyond the average life span, with both strategies providing a significantly higher spending floor well into a retiree’s 90s and beyond.

In Strategy 1, most of the spending increase and longevity risk mitigation benefits are generated by the annuities, rather than the asset allocation change. This reflects the fact that guaranteed lifetime income streams (e.g., annuities, Social Security) reduce the pressure to underspend early in retirement — adding flexibility — and provide a higher and more reliable spending floor throughout retirement — regardless of how long that period lasts.
More spending ability, less longevity risk

Figure 1: Incorporating guaranteed lifetime income increases spending from retirement savings by 35% at age 65

Mean annual spending throughout retirement from retirement savings alone, excluding Social Security benefits (undiscounted real dollars)

$10,000  +35% spending increase in the first year
$5,000  +29% average spending increase
$0

65 70 75 80 85 90 95 100 105 110 Age

● Base case  ● Strategy 1

A reduction in downside risk

Figure 2: Adding guaranteed lifetime income raises the floor on retirees’ spending by 33%

Cumulative spending from retirement savings alone (excluding Social Security benefits) at the fifth percentile of modeled outcomes over the first 15 years of retirement (undiscounted real dollars)

$50,000
$40,000
$30,000
$20,000
$10,000
$0

Age 65 75 80 85 90 95 100 105 110

$34,589  33% downside risk reduction
$46,170

● Base case  ● Strategy 1

The bottom line: An optimal retirement income strategy considers the totality of the retirement income toolkit. Taking a whole-portfolio approach that protects against multiple risk factors allows for comprehensive solutions that help to increase the chances of meeting the saver’s ultimate financial objectives.

Expanding support for decumulation

While planners and the industry have largely focused on the accumulation phase, it’s clear that today’s savers and retirees need more help for the decumulation phase.

Although financial outcomes play out on an individual level, current retirement security challenges result from a combination of personal, private-sector and public-sector factors. Policymakers should collaborate with the private sector to advance solutions and improve understanding of the decumulation phase of retirement. For example, recent legislation, such as the retirement reform package known as SECURE 2.0, provided regulatory certainty and flexibility for plan sponsors and participants interested in incorporating guaranteed lifetime income products into their decumulation strategy. Now, Congress and federal agencies can prioritize educating individuals and employers on the new rules, evaluating their implementation and impact and determining whether additional changes are necessary. Additionally, the federal government could more actively help Americans make better-informed decisions by improving the choice architecture for Social Security claiming by emphasizing the benefits of delaying the claiming date for those who are able.

Effectively optimizing retirement income requires addressing the problem from all angles, with a particular focus on helping those Americans who lack access to traditional financial planning advice and tools. The retirement ecosystem — recordkeepers, plan sponsors, asset managers, insurers and more — has a responsibility to work with policymakers to develop creative solutions to modern problems.