Retirement-income planning has emerged as a distinct field in the financial services profession. But because it is still relatively new, the best approach for building a retirement income plan remains elusive. In the past, I’ve described two fundamentally different philosophies for retirement-income planning: probability-based and safety-first. Those philosophies diverge on the critical issue of where an individual must place their trust: in the risk/reward tradeoffs of an equity portfolio, or on the contractual guarantee of insurance products.

Those favoring investments rely on the notion that the market will eventually provide favorable returns for most retirees. Though stock markets are volatile, stocks can be expected to outperform bonds over a reasonable amount of time. Those believing strongly in investments consider upside potential from a portfolio to be so significant that there is a very limited role for insurance solutions. Why needlessly cut off the upside? On the investment side, there is also a general unease about relying on the long-term prospects of insurance companies or bond issuers to meet their contractual obligations. Perhaps not fully understanding the implications of how sequence-of-returns risk differs from market risk, the belief is that in the rare event that the performance for the equity portfolio does not materialize, it would imply an economic catastrophe that would sink insurance companies as well.

Meanwhile, those favoring insurance believe that contractual guarantees are reliable and that an overreliance on the assumption that favorable market returns will eventually arrive is emotionally overwhelming and dangerous for retirees. Indeed, they are more concerned about the implications of market risk than those favoring investments. Even if there is a low probability of portfolio depletion, each retiree gets only one opportunity for a successful retirement. At the very least, essential income needs should not be subject to the whims of the market. As well, advocates from this side view investment-only solutions as undesirable because the retiree retains all the longevity and market risks. These are risks that an insurance company is in a better position to manage.

But retirement-income planning is not an either/or proposition.

We must step away from the notion that either investments or insurance alone will best serve retirees. Each has its own advantages and disadvantages. An entire literature on “product allocation” (introduced by Peng Chen and Moshe Milevsky in 2003) has arisen, showing how a more efficient set of retirement outcomes can be obtained by combining investments with insurance.

Before showing how greater integration can be achieved, let’s take a step back and look at a detailed summary of the advantages and disadvantages of investments and insurance when it comes to meeting retirement goals.
Retirement goals

It is important to first clarify the goals for a retirement-income plan. It seeks to meet the specific financial goals identified by a client in a way that best manages the wide variety of risks that threaten those goals. The primary financial goal for most retirees relates to their spending: maximize spending power [lifestyle] in such a way that spending can remain consistent and sustainable without any drastic reductions, no matter how long the retirement lasts [longevity]. Other important goals may include leaving assets for subsequent generations [legacy], and maintaining sufficient reserves for unexpected contingencies [liquidity].

Using those bracketed terms, financial goals for retirement can be summarized as:

<table>
<thead>
<tr>
<th>Lifestyle</th>
<th>Liquidity</th>
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<tbody>
<tr>
<td>Longevity</td>
<td>Legacy</td>
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Investments and insurance have advantages and disadvantages when it comes to meeting each of these goals.

The advantages and disadvantages of investments in retirement

With investment solutions, a higher lifestyle may be supported if one is willing to invest aggressively in the hope of subsequently earning higher market returns to support a higher income rate. And should decent market returns materialize and sufficiently outpace inflation, investment solutions can be sustained indefinitely. Portfolio balances are also liquid in the sense that they are accessible to the retiree and are not locked away as part of a contractual agreement such as an annuity. Upside growth could also support a larger legacy and provide liquidity for unexpected expenses.

However, the dual impact of sequence-of-returns and longevity risk creates a very real possibility that one cannot support their desired lifestyle over the full retirement period. These are risks which a retiree cannot offset easily or cheaply. Investment approaches seek to reduce sequence and longevity risk by having the retiree spend conservatively. Retirees spend less as a way to avoid depleting their portfolio through a bad sequence of returns in early retirement, and they also spend less because they must plan to live well beyond their life expectancy. The implication being, should the market perform reasonably well in retirement, the client will significantly underspend relative to their potential.

At the same time, longevity protection (the risk of outliving savings) is not guaranteed with investments and sufficient assets may not be available to support a long life or legacy. A “reverse legacy” could result if the client’s portfolio is so depleted that they must rely on others (often one’s children) for support. This is particularly important in light of the ongoing improvements in mortality, which means that today’s clients will live longer than those from earlier cohorts. For healthy clients in their 60s, we are approaching the point where 40 years must replace 30 years as a conservative planning horizon.
Clients experience reduced risk capacity as they enter retirement; with reduced flexibility to earn income, they are more vulnerable to forced lifestyle reductions resulting from the whims of the market.

Assets may also be less liquid than they appear. Though they are technically liquid, a retiree who spends assets that were meant to cover spending needs later in life may find that those later needs can no longer be met.

As well, individuals experience declining cognitive abilities with age, which make it increasingly difficult for them to manage the investment and withdrawal decisions required with a systematic withdrawal strategy. This concern may be offset by working with a good financial advisor.

The advantages and disadvantages of insurance in retirement

Insurance companies pool sequence and longevity risks across a large base of retirees, as a defined-benefit pension does, allowing for retirement income spending that is more closely aligned with average long-term fixed income returns and longevity. This may support a higher lifestyle than what is feasible for someone self-managing these risks by assuming low returns and a longer time horizon.

Guarantees can also provide a peace of mind for one’s lifestyle that leads to a less stressful and more enjoyable retirement experience. Overly conservative retirees become so concerned with running out of money that they spend significantly less than they could, and a monthly annuity payment can provide the explicit permission to spend and to enjoy retirement. The receipt of a monthly check from an annuity can also simplify life for those with reduced cognitive skills or for surviving spouses who may be less experienced with regard to financial matters.

Longevity protection is a primary benefit from an insurance solution, as it provides a guaranteed income for as long as one lives. It hedges longevity risk and calibrates the planning horizon to something much closer to life expectancy. Those who do not live long lives subsidize the income payments to those who do live longer than life expectancy (“mortality credits”). Both groups enjoy higher spending because they have pooled the longevity risk and do not have to plan based on an overly conservative time horizon. This higher income also provides flexibility to spend less than possible and maintain more reserves to manage inflation risk.

A death benefit can also be created with life insurance to provide a specific legacy amount. An income annuity dedicates assets specifically toward the provision of income, allowing other assets to be earmarked specifically for growth. This can allow for a larger legacy, especially when the retiree enjoys a long life and more of their income is supported by the annuity’s mortality credits.

But many retirees may be significantly underfunded and may not be able to reach their goals even after pooling risks. Though income annuities can guarantee a lifestyle, they lack the ability on their own to provide upside potential, and inflation-protected versions are costly. In such cases, these clients may need to rely on the growth potential of their investments to achieve their retirement goals and to protect against inflation. Though risky, some clients may tolerate those disadvantages and conclude that the loss of upside potential is worth the sacrifice.
Liquidity could also be a problem with insurance solutions when there are unexpected expenses to be met. While some annuity products offer liquidity, there is generally a high cost for this flexibility and this is a potential weakness for insurance solutions. As for a legacy, though the death benefit in an insurance contract may grow over time, it is not likely to keep pace with inflation. As well, income annuities do not offer legacy benefits without adding additional riders, which reduce the power of mortality credits.

**The bottom line**

In terms of integrating investments and insurance, the conclusion I've reached is that traditional bonds do not necessarily make sense for retirement portfolios. Instead, income annuities and life insurance act as “actuarial bonds.” They are invested in underlying fixed-income portfolios, and they provide a series of payments which are linked to the client’s longevity. The risk pooling features of insurance and the upside potential of stocks make for an effective combination for retirement income.
### Table 1
Pros and Cons for Investment and Insurance Solutions in Retirement

#### Investment Solutions

<table>
<thead>
<tr>
<th></th>
<th>Pro</th>
<th>Con</th>
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<tbody>
<tr>
<td><strong>Lifestyle</strong></td>
<td>Potential for higher lifestyle throughout retirement with a more aggressive spending and investment approach should higher market returns subsequently materialize.</td>
<td>The dual impact of sequence and longevity risk threatens the ability to support a desired lifestyle. Retirees experience reduced risk capacity as their lifestyle is more vulnerable to portfolio losses.</td>
</tr>
<tr>
<td><strong>Longevity</strong></td>
<td>Should decent market returns materialize, investment solutions can be sustained over a long retirement.</td>
<td>Longevity protection is not guaranteed. Efforts to plan for a long life also require a lower spending rate. With longevity, one must also plan for how declining cognitive abilities will hamper the ability to manage investments.</td>
</tr>
<tr>
<td><strong>Liquidity</strong></td>
<td>Portfolio balances are liquid in the sense that they are accessible to the retiree and are not locked away as part of a contractual agreement.</td>
<td>Assets may be less liquid than they appear. Though they are technically liquid, a retiree who spends assets that were meant to cover spending needs later in life may find that those later needs can no longer be met.</td>
</tr>
<tr>
<td><strong>Legacy</strong></td>
<td>The potential to generate upside growth for investments can support a larger legacy.</td>
<td>Downside risks could materialize, leading to asset depletion and the possibility of a &quot;reverse legacy&quot; as relatives are called upon to provide support.</td>
</tr>
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#### Insurance Solutions

<table>
<thead>
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<tbody>
<tr>
<td></td>
<td>Insurance can pool sequence and longevity</td>
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</table>
### Lifestyle
Risks across a large base, allowing for retirement spending that is more closely aligned with average long-term fixed income returns and longevity. Guarantees can also provide peace of mind and a license to spend, which leads to a less stressful more enjoyable retirement experience.

Though income annuities can guarantee a lifestyle, they lack ability for upside potential, and inflation-protected versions can be costly in current markets. More aggressive retirees may simply conclude that loss of upside potential is simply too great to sacrifice.

### Longevity
This is a primary benefit from an insurance solution, as it provides a guaranteed income for as long as one lives. It hedges longevity risk by providing a mechanism for those who do not live long to subsidize payments to those who do live long (mortality credits).

Retirees may be concerned with the ability of insurance companies to meet contractual guarantees over the long term. Not all insurance solutions will include inflation-protection over a long life. Inflation-protection may need to be sought elsewhere.

### Liquidity
Some insurance solutions provide liquidity at a cost.

Liquidity is generally not the reason for using insurance. Additional costs for liquidity may be high.

### Legacy
A death benefit can be created with life insurance to provide a specific legacy amount with tax advantages. An income annuity dedicates assets specifically toward the provision of income, allowing other assets to be earmarked specifically for growth. With more income from mortality credits over long retirements, partial annuitization eventually supports a larger total legacy.

Though death benefits may grow over time, they are not likely to keep pace with inflation. Income annuities do not offer legacy benefits without additional riders, which reduce the availability of mortality credits.

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