CHIEF INVESTMENT QUARTERLY

Who Knew Annuities Could Be So Exciting?!

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For some people, talking about annuities[1] is like watching paint dry. For the rest, it's the same. But the concept behind annuities is too important to ignore, and is even a little bit interesting. If they were more commonly used in practice, they could help us with one of the biggest retirement challenges of our day, making Defined Contribution (DC) plans more like Defined Benefit (DB) plans. And if our DC representatives (Washington, DC, that is) can work together, annuities could be part of an important improvement in retirement security.

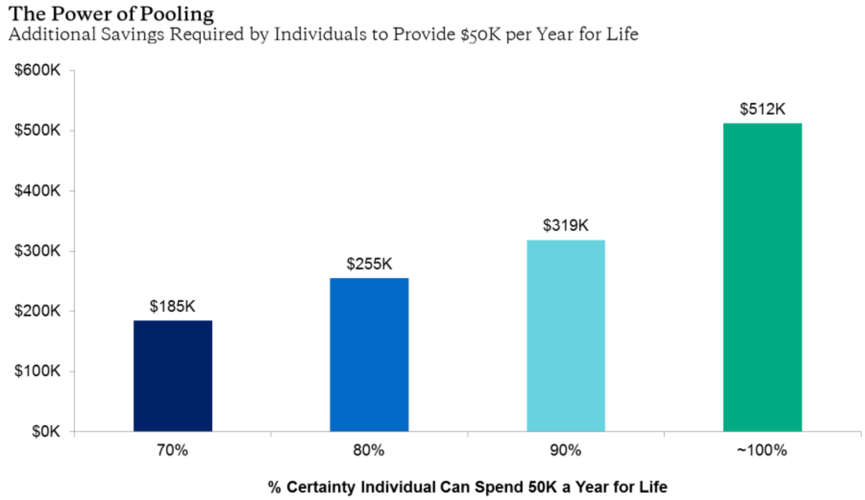
As the number of private sector DB plans has shrunk[2] and the number of DC plans has grown[3], something has been lost, the pooling of longevity risk, which alone costs plan participants 25%[4] or more of their spending power.

In a DB plan, the substantial risk that you may outlive your savings is mitigated by pooling. With pooling, each individual member helps insure the others. The person who will live a long life and the person who won't are both offered a uniform monthly payout for life. This gives them a known and certain amount available for retirement spending, and they don't have to save (or have their DB plan's investment team save) extra in case they live to be 100.

On the other hand, in a DC plan, individuals face longevity risk all by themselves, since the vast majority of DC plans do not pool it. Going it alone means you must save more now or spend less in retirement, or both.

We have done some calculations to demonstrate this. For example, an individual retiring at 65 who wants to spend $50,000 per year (and have 90% certainty that she will not run out of money) would have to have saved $319,000 more than someone whose longevity risk is properly pooled. Or to put it another way, consider two individuals who retire with the same $760,000 of savings: the one with pooling could spend $50,000 per year, but the other, with the same savings but no pooling, could spend only $35,000.[5]

Buying an annuity at age 65 can be a sound investment; investing in an annuity at an earlier age could provide even greater benefits. The problem here is that the vast majority of employers that offer 401(k) plans do not offer annuities as an investment option.[6] Some 401(k) plans offer annuities that participants can purchase upon retirement, but by then much of the benefit of investing in annuities will already have been missed. If individuals can purchase annuities in their 401(k) plans for years before their retirement, they may be able to manage far more effectively against longevity risk.



Source: AQR, Bloomberg, and Hueler Income Solutions. Annuity calculations are based on analysis from market pricing offered at Hueler Income Solutions and are inclusive of expected manager costs. The savings amount required for individuals as different levels of certainty is based on 6500 simulations of cash flow present values of a single person. We assume that people are 65 at retirement and require $50,000 per year for living expenses. We assume the discount rates follow a zero-coupon U.S. Treasury curve. Mortality rates are from the U.S. actuarial tables on the Social Security website. This example is hypothetical and for illustrative purposes and does not represent the retirement needs of any specific individual.

When a fifty year-old buys an annuity to pay $50,000 annually starting at 65, she needs $430,000. An individual who goes it alone but wants to have $50,000 annually starting at 65 would need $650,000.[7]

The annuity is not only cheaper thanks to pooling; it is also safer. First, it protects against market risk — the risk that the markets are terrible just as one is about to retire or right at the beginning of retirement.

Second, the annuity is able to protect against longevity risk. The hypothetical example above is for a person who goes it alone and saves for a 90% certain spending outcome. That sounds pretty good until we realize that's still a one in ten chance of falling short of the goal. An annuity, on the other hand, is guaranteed.[8]

So, why don't more plan sponsors offer annuities as investments in the DC plan? Well, first, there is the paint-drying problem. Second, annuities still carry a reputation as being expensive and complicated to buy. But when they are bought in bulk as part of an institutionally administered DC plan, these concerns can be substantially mitigated. The biggest hurdle, though, is the fear of litigation.

Under ERISA an employer that provides a 401(k) takes on fiduciary responsibility and must act "with the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent [person] acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of a like character and with like aims…".[9]

This standard can cause employers to limit the range of otherwise sound products that they select, for fear of being unfairly second guessed. Many shy away from annuities because of legal uncertainty about how ERISA fiduciary standards would apply to selection of an annuity provider, and even to the annuity provider's investment policy. It's the inability to bear this legal risk that has left longevity risk, and its huge deadweight cost, on the shoulders of each individual participant.

When it comes to selecting an insurer and offering annuities in a 401(k) plan, the prudent person standard can be met. But only a few very forward-thinking employers, such as United Technologies have accepted the challenges, and are providing their employees the option to start pooling their longevity risk. In fact, their approach to offering this option through their DC plan has been widely used among UTC employees. Over 35,000 employees have participated, including about two out of every three new UTC employees since UTC initiated this option.[10]

Today, beyond the legal uncertainties, employers face other challenges in offering annuities, such as recordkeeping hurdles, but until there is a legislative “safe harbor” for insurer selection, few employers will put in the effort to overcome the obstacles and offer these programs.

Fortunately, there is legislation pending in Washington that may create this safe harbor. It would allow plan sponsors to rely on state insurance commissioners and their regulatory requirements in selecting annuity providers. This legislation has bi-partisan support in both houses. In the last Congress it passed the House and had bipartisan support in the Senate. In this Congress, similar legislation has been proposed in the House by Rep. Richard Neal, the Chairman of the House Ways and Means Committee and passed by that committee on April 2. And the new Chairman of the Senate Finance Committee, Sen. Charles Grassley and the Ranking Member Sen. Ron Wyden recently introduced very similar legislation.

This legislation increases opportunities for security in retirement. It makes political sense and mathematical sense. And, rather than watching paint dry, maybe we’ll all get a chance to see that rare current-day political occurrence: both houses and both parties cooperating on something important.

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[1] For the purposes of this article “annuities” refers to traditional fixed annuities, which make fixed payments based on a predefined principal.

[2] Source: “How many American workers participate in workplace retirement plans?”

[3] Source: “51 percent of private industry workers had access to only defined contribution retirement plans”

[4] Source: AQR, Bloomberg, and Hueler Income Solutions. Annuity calculations are based on analysis from market pricing offered at Hueler Income Solutions and are inclusive of expected manager costs. The savings amount required for individuals as different levels of certainty is based on 6500 simulations of cash flow present values of a single person. We assume that people are 65 at retirement and require $50,000 per year for living expenses. We assume the discount rates follow a zero-coupon U.S. Treasury curve. Mortality rates are from the U.S. actuarial tables on the Social Security website. The hypothetical amount an individual can spend a year if she saves the same amount as the annuity holder assumes she lives at least to 100 years old. This example is hypothetical and illustrative and does not represent the retirement needs of any specific individual.

[5] Source: AQR, Bloomberg, and Hueler Income Solutions. Annuity calculations are based on analysis from market pricing offered at Hueler Income Solutions and are inclusive of expected manager costs. The savings amount required for individuals as different levels of certainty is based on 6500 simulations of cash flow present values of a single person. We assume that people are 65 at retirement and require $50,000 per year for living expenses. We assume the discount rates follow a zero-coupon U.S. Treasury curve. Mortality rates are from the U.S. actuarial tables on the Social Security website. The hypothetical amount an individual can spend a year if she saves the same amount as the annuity holder assumes she lives at least to 100 years old. This example is hypothetical and illustrative and does not represent the retirement needs of any specific individual.

[6] Note: As of the date of this publication, AQR does not offer annuities in 401K programs.

[7] Source: AQR, Bloomberg, and Hueler Income Solutions. Assumes 90% certainty that individual will have 50K for life. Calculations are based on same methodology as described in footnote 4, except discount rates follow a 15-year forward zero-coupon U.S. Treasury curve and is discounted to present value using the prevailing 15-year U.S. Treasury rate. This example is hypothetical and illustrative and does not represent the retirement needs of any specific individual.

[8] Based on the claims-paying ability of the issuing insurance company

[9] Source: The Employee Retirement Income Security Act of 1974 (ERISA)

[10] Source: United Technologies Corporation

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