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Why Indexed Universal Life Income Streams Need to Be Managed—Part 2

By Ben H Wolzenski and John S. McSwaney

Ben H Wolzenski, FSA, MAAA, has been a member of the Society of Actuaries since 1972 and has worked with individual life products his entire career. John S. McSwaney, CLU, ChFC, AEP, is a past president of AALU and the International Forum and has been a life agent since 1968. Their working affiliation extends over 40 years.

Part 1 of this article, published in the October 2018 edition of this newsletter, described the incidence of returns risk and gave examples of the problems it can create when a policyholder takes an income stream from indexed universal life (IUL). Testing sequences of returns based on historical S&P performance and a hypothetical 12.5 percent cap IUL policy showed a wide range of risk of lapse frequency for income streams that were not managed. There was just a 2 percent chance of lapse by age 85, with crediting rates from a favorable population of returns combined with a conservative method of taking income, but an 89 percent chance of lapse by age 90, with crediting rates taken from an unfavorable population of returns combined with an aggressive method of taking income.

Part 2 of this article continues with more results and a description of approaches to managing the income stream.

RESULTS FOR DIFFERENT MODELS, DIFFERENT WITHDRAWAL METHODS

Wolzenski: When we tested a product with a lower cap (11.5 percent) and crediting rate, the results were not quite as severe. For example, with participating loans to age 90 and a lower illustrated annual income, “only” 64 percent of the policies would lapse by age 90 with the 2000 through 2016 S&P data compared with 76 percent using the higher-cap product model. Using withdrawals to basis and fixed loans reduces the illustrated income and reduces risk somewhat, especially the risk of lapses before age 85. The use of international indexes in a product along with the S&P also produced less risk, as did the use of monthly allocations to indexed accounts and monthly income payments rather than annual.

McSwaney: We also found that having crediting rates based on participation rates, as well as a cap, reduced risk. In brief, we found a number of factors that reduced the risk, but the bottom line was still that the income stream must be managed to be sure of avoiding lapse and a resulting tax event. That leads to the question of how income streams should be planned and managed.

Wolzenski: One step many carriers have taken is to provide an “overloan” rider. If the policyholder activates the “overloan” rider, it will prevent the policy from lapsing, although the net cash value and death benefit may eventually be reduced to zero. But for that to work, the policyholder or agent must monitor and project the ratio of the net cash value to account value every year without fail through advanced attained ages. Our research showed that lapses are most likely to occur when the insured is in his or her 80s or 90s. Insureds are increasingly living to those ages, with or without full cognitive ability. We think relying on an insured or a servicing agent (if there is one) to provide the necessary monitoring is risky at those attained ages. A better approach to avoiding lapse and consequent phantom income is needed.

McSwaney: Starting with an income based on current assumptions, including the maximum permissible interest crediting rate that can be illustrated, increases the chances that the income stream will need to stop earlier than planned or be drastically reduced. This can be the case even if the income stream has been adjusted within limits along the way. A different strategy is to start the income stream at a level that is highly likely to be maintained based on historical index returns and to adjust that income with a management process. That approach greatly reduces the chances of needing to severely reduce or stop the income stream and makes it likely that the income stream can be adjusted upward in future years.

That’s a high-level description. I know you want to provide additional details and data.

Our research showed that lapses are most likely to occur when the insured is in his or her 80s or 90s.

Wolzenski: We’ve discussed results for income to age 100, but often income is illustrated for a shorter period, such as to age 85. What happens then? The result is obvious if you think about it: Shorter income periods are even riskier. The shorter the income period, the less extra cash value there is to fund future income payments and the less safety margin there is to get through years of low crediting rates.

INCOME MANAGEMENT PROCESS— WHAT WE TESTED AND FOUND

Turning to the management process, we have seen that simply starting with the income that is the maximum permitted to be illustrated has significant risk. But what income amount is sufficiently less risky, and how do we manage whatever initial income is chosen?

The approach we took was to look at the level income stream that could be taken based on actual sequences of index returns—and, therefore, hypothetical crediting rates—for every different starting date within the historical periods of 1997 through 2016 and 2000 through 2016. For example, if we use sequences of the S&P one-year returns for every starting date from 2000 through 2016 and solve for the level income stream to age 100 using participating loans to age 90, the annual income ranges from \$94,309 to \$207,250, even though every sequence used returns from the same period of time.

What we found was that even with a well-developed management process, starting with the AG49 maximum income amount, there is a significant probability of needing to terminate income and invoke the “overloan” option—or at least reduce the income substantially to a level that is more likely, or even guaranteed, to be sustainable. However, if the initial income is no higher than 90 percent of the income streams calculated using every starting date in 2000 through 2016, it is extremely unlikely for the overloan option to be needed—or even for income to be precipitously reduced to a safe level.

Furthermore, it is not all given up by starting with a lower initial income. The management process can increase future income payments if returns are more favorable than needed.

McSwaney: We have referred to a process for managing the income stream several times. How would you describe it?

INCOME MANAGEMENT PROCESS DESCRIPTION

Wolzinski: First, as a result of testing different product models, it is clear that the management process should be customized for the product being managed. At a minimum, the parameters used in the management algorithm should be tested for the particular product. The process I developed is simply one example that worked for the product models I tested. Here is a general description of that process.

1. For the chosen initial income level, calculate the level interest crediting rate (not more than the AG49 maximum) for all future policy years that produces that income and the target cash value at a future age, such as 100 or 120.



2. After the next policy year has passed, actual indexed interest (and bonuses, if any) will have been credited. Recalculate a *tentative* new level annual income that produces the target cash value. Make an adjustment to future income *partially* reflecting this recalculated income.
 - a. Adjusting income by the full amount of the recalculation makes the income vary more than is needed to produce a stable long-term result, hence the partial adjustment.
 - b. As an example of parameters of an adjustment algorithm that could be used, 50 percent of any increase or decrease produced by the recalculation could be applied, and that increase or decrease could be limited to 5 percent of the previous income amount.
3. Once the next income amount has been determined, recalculate the level interest crediting rate (not more than the AG49 maximum) for all future policy years that produces that income and the target cash value at a future age, such as 100 or 120.
4. Repeat Steps 2 and 3 through the entire income period.

EXAMPLE

Consider a hypothetical policy with \$1.77 million of cash value at age 65, for which the income stream to age 100 is \$158,095 using participating loans to age 90 and an interest crediting rate of 7.14 percent, the maximum permitted under AG49 for this then-current cap of 12.5 percent.

1. If the maximum illustrated income of \$158,095 is chosen, the initial level of interest crediting rate would be 7.14 percent. Had a lower income been chosen, a lower initial level rate would be calculated to produce the target cash value.
2. At the end of the first policy year, actual indexed interest is credited based on the S&P point-to-point return of 11.49 percent. Using the initial assumed level crediting rate of 7.14 percent and the new cash value, recalculation produces a *tentative* new level annual income of \$165,775 to age 100.
 - a. Assume that the adjustment algorithm chosen is to reflect 50 percent of the calculated change in annual income, with a further limit of 5 percent in the change in either direction in one year.
 - b. The recalculated level annual income would be \$161,635, an increase of 2.2 percent.
3. Using the new annual income of \$161,635, the level of interest crediting rate for all future policy years that produces the target cash value is 7.05 percent. This is the level of assumed interest rate that will be used in Step 1 above after completion of the next policy year.

There are two refinements and a couple of special steps that I suggest be built into the process.

When participating loans are used, the recalculated income amounts (before adjustment) will vary more significantly, especially as the end of the income period or the end of the period for using participating loans approaches. Two refinements are indicated.

1. When recalculating income, in addition to meeting the target cash value, the new income amount should not be greater than an amount that meets one of the following two tests:
 - a. The net cash value at the end of each year, prior to crediting of annual interest, is sufficient to exercise the “overloan” option.
 - b. The policy will not lapse in any future year with the guaranteed interest crediting rate. (This may be a more lenient test in the last few years of the income period.)

2. In the last several years before the end of participating loans or income payments (whichever is sooner), a single zero percent crediting rate can create a drastically reduced recalculation of income. A safer approach is to switch from participating to fixed loans after a high crediting rate within five years or so of when income would end or when the switch to fixed loans would have occurred.

The two special steps occur when the policy is in danger of lapsing.

1. If at the beginning of any policy year the guaranteed interest crediting rate would produce a cash value at the end of that year insufficient to exercise the overloan rider (and insufficient to prevent a lapse in all future policy years with reduced income), then the overloan rider should be automatically exercised after withdrawing an income amount that leaves just enough net cash value to exercise the rider.
2. If at the beginning of any policy year the guaranteed interest crediting rate would produce a cash value at the end of that year insufficient to exercise the overloan rider (but is sufficient to prevent a lapse in all future policy years with some reduced level income), then the income amount should be reduced to that amount and future recalculated income should be made at the guaranteed interest rate.

RECOMMENDED TO INSURERS

McSwaney: A management process like this cannot be forced on policyholders, but if it is available to be elected, it can prevent a lot of problems in the future. The availability of such a “fail-safe” system would provide assurance to agents and policyholders as well as to conscientious company personnel.

Wolzenski: Other modeling approaches and assumptions could be used to assess the income management issue, and I welcome feedback on these results or other results that readers may have obtained. Furthermore, I am happy to provide more detailed results of our research without charge upon request. ■



Ben H. Wolzenski, FSA, MAAA, is a managing member with Actuarial Innovations LLC. He can be contacted at bwolzenski@gmail.com.



John S. McSwaney, CLU, ChFC, AEP, is president of McSwaney & Associates Consulting, Inc. He can be reached at jmcswaney@me.com.