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Why Indexed Universal Life (IUL) Income Streams Need To Be Managed: Part 1

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WHAT'S THIS ABOUT AND A QUICK BOTTOM LINE

Wolzenski: John, over the past decade working with producers, you've observed that most Indexed Universal Life (IUL) new premium comes from sales that illustrate policy loans or withdrawals, either for retirement income or to repay premium financing.

McSwaney: That's right.

Wolzenski: Illustrations show cash coming out of the contract at current assumptions, at mid-point assumptions, at an alternate scale, and at guarantees. There is a wide range of possible outcomes.

McSwaney: By far the most important illustrations in making the sale are those based on current assumptions, either at the maximum permissible interest rate or a slightly lower rate chosen by the agent. But the initial illustration does not predict what income can come out of the policy decades later; it only shows the income that could be taken under current assumptions.

Wolzenski: That's why we've been researching the issue for the past two years. How about a few sentences to sum up all the results for impatient readers. Details can follow.

McSwaney: 1. When loans or withdrawals are about to begin, it is prudent to set the initial income at less than the current assumption maximum. 2. To avoid potential tax consequences, the amount taken out of the policy needs to be adjusted, preferably annually, for as long as the income stream continues. 3. Making the right adjustments is not easy, and it is not realistic to expect policyholders and agents to do it well, especially if they are in their 80s or 90s. Carriers need to adopt systems to do it.

Wolzenski: Part 1 of this article will provide background and some data regarding why there is a problem. Part 2 will provide additional data and discuss approaches to solutions.

WHY THERE'S A PROBLEM

Wolzenski: Suppose it's time to start taking income. What's wrong with just using a lower crediting rate than the maximum permitted and feeling that a safety margin has been provided?

McSwaney: It's called the "incidence of returns" risk. Even if the *average* credited rate over the life of the income stream is as good as illustrated, the policy can lapse and produce a large taxable income if the *order of returns* is unfavorable.

Wolzenski: Here's an example for a hypothetical but representative IUL policy with a 0 percent floor and a cap of 12.5 percent. This would be a "Benchmark Index Account" defined by Actuarial Guideline 49 (AG49). The policy would have been for $1 million issued to a male super preferred age 45, with income to age 100 starting at age 65 based on the maximum permitted level interest crediting rate permitted by AG49.

The chart in Table 1 shows the result of converting the 20 one-year returns of the S&P (without dividends) that occurred on May 15 from 1997 through 2016 to IUL crediting rates, then applying the crediting rates to an income illustration. By using each of the twenty crediting rates as the first crediting rate in the year after income begins, twenty different outcomes are produced (see Table 1). (Twenty different sequences of returns are produced by using the same order of returns, but with different starting points, and reusing crediting rates from the beginning of the time period as needed out to age 100.)

Table 1
Policy Results Using the Same Twenty Crediting Rates in Different Order

- Male super preferred issue age 45
- $1 million face amount, increasing death benefit at age 65, then level
- Pay $45,000 annual premium for 20 years
- Indexed UL policy with 1 year S&P, 0% floor, 12.5% cap
- Cash value at age 65 = $1,769,278
- Annual income to age 100 with participating loans = $167,438
- Results if income is unchanged and insured lives to age 100

	S&P index value		S&P	0% floor	
Date	on Date	1 yr prior	Return	12.5% cap	Results if Date was 1st anniversary after income started
5/15/1997	841.88	665.42	26.52%	12.50%	Policy cash value at age 100 = $4,225,559
5/15/1998	1108.73	841.88	31.70%	12.50%	Policy lapses at insured's age 91
5/15/1999	1339.49	1108.73	20.81%	12.50%	Policy lapses at insured's age 89
5/15/2000	1452.36	1339.49	8.43%	8.43%	Policy lapses at insured's age 82
5/15/2001	1249.44	1452.36	–13.97%	0.00%	Policy lapses at insured's age 87
5/15/2002	1091.07	1249.44	–12.68%	0.00%	Policy lapses at insured's age 87
5/15/2003	946.67	1091.07	–13.23%	0.00%	Policy lapses at insured's age 92
5/15/2004	1084.1	946.67	14.52%	12.50%	Policy cash value at age 100 = $8,322,389
5/15/2005	1165.69	1084.1	7.53%	7.53%	Policy cash value at age 100 = $8,307,119
5/15/2006	1294.5	1165.69	11.05%	11.05%	Policy cash value at age 100 = $8,526,005
5/15/2007	1501.19	1294.5	15.97%	12.50%	Policy lapses at insured's age 88
5/15/2008	1423.57	1501.19	–5.17%	0.00%	Policy lapses at insured's age 87
5/15/2009	882.88	1423.57	–37.98%	0.00%	Policy cash value at age 100 = $2,725,440
5/15/2010	1136.94	882.88	28.78%	12.50%	Policy cash value at age 100 = $5,683,908
5/15/2011	1329.47	1136.94	16.93%	12.50%	Policy cash value at age 100 = $4,535,306
5/15/2012	1330.66	1329.47	0.09%	0.09%	Policy cash value at age 100 = $4,193,332
5/15/2013	1658.78	1330.66	24.66%	12.50%	Policy cash value at age 100 = $7,308,984
5/15/2014	1870.85	1658.78	12.78%	12.50%	Policy cash value at age 100 = $4,221,188
5/15/2015	2122.73	1870.85	13.46%	12.50%	Policy lapses at insured's age 94
5/15/2016	2066.66	2122.73	–2.64%	0.00%	Policy lapses at insured's age 92

The same twenty returns, but in different order, produce very different results.

THE SITUATION WHEN IT'S TIME FOR INCOME TO START

McSwaney: Consider the position of someone who is about to begin distributions for income. The accumulated cash value may be more or less than originally illustrated, but that does not really matter. The question is how much income can one safely draw from the policy given the cash value there? It also does not matter if the policyholder wants to start income earlier or later than originally planned. Whenever that is, the starting point is an in-force illustration showing an income stream.

Wolzenski: The in-force illustration will show more than one possible income stream, and the most attractive will be that based on current assumptions with the maximum permitted crediting rate. Let's consider what happens if the policyholder takes that income stream every year, as we did in Table 1.

Indexed IUL crediting rates do not remain constant from year to year, despite what illustrations show. Actual crediting rates will vary between the floor, the cap and rates in between. That means that the compliant illustrations available to policyholders and agents, which limit crediting rates to the maximum permitted by AG49, cannot model crediting rates realistically.

Table 2
Distribution of Persistency Results Using Returns for Two Time Periods

- Male super preferred issue age 45
- $1 million face amount
- $45,000 annual premium to age 65
- 12.5% cap 0% floor
- S&P index - one year point-to-point

	Withdrawals to Basis + Fixed Loans		Participating Loans to Age 90+ Fixed Loans		Participating Loans to Age 100+ Fixed Loans	
Cash Value at Age 65	1,769,278		1,769,278		1,769,278	
Annual Income	131,148		158,095		167,438	
S&P return years	1997–2016	2000–2016	1997–2016	2000–2016	1997–2016	2000–2016
Average annual crediting rate	7.58%	6.76%	7.58%	6.76%	7.58%	6.76%
vs. 7.15% rate	0.43%	–0.39%	0.43%	–0.39%	0.43%	–0.39%
	Policy persistency (unmanaged) with monthly historical S&P returns					
Persist to A100	67%	20%	72%	17%	45%	9%
Lapse by Age 100	33%	80%	28%	83%	55%	91%
Lapse by Age 90	9%	29%	19%	76%	38%	89%
Lapse by Age 85	2%	6%	3%	56%	11%	78%
Lapse by Age 80	0%	0%	0%	12%	6%	36%

BETTER TOOLS ARE NEEDED

To assess the income streams realistically requires calculations not in AG49 compliant illustrations. Spreadsheet models of actual or representative IUL policies are needed so that interest crediting rates can be tested outside the limits of AG 49. Then realistic patterns of interest crediting rates need to be available for testing.

To these ends, I built two IUL policy models, both with annual crediting based on the S&P index with Benchmark Index Accounts, that is, a 0 floor and a cap. One model was for products with a relatively high cap and had values representative of those of several such products. That is, it was not an actual product, but the model produced accumulated values and income streams that were typical of a group of actual products. The second model used a lower cap and corresponding charges and other features.

To create realistic crediting rate sequences, I chose to use actual monthly S&P index values over the past 20 years to create patterns of indexed interest crediting rates. By starting at different dates, and re-using all monthly index values in the time frame, over 200 sequences are created, each based in historical values.

McSwaney: You used two different time periods, 1997–2016 and 2000–2016. Why was that?

Wolzenski: In the years after a policyholder starts an income stream, the index returns could be either more or less than the historical average that AG49 uses to set the current maximum illustrated rate. The period 1997–2016 produced index returns that averaged higher than the recent AG49 period, whereas the period 2000–2016 produced index returns that averaged lower than the AG49 period.

TEST RESULTS—A FIRST LOOK

McSwaney: So we have a range of returns—both better and worse, on average, than those that produced the AG49 maximum.

Wolzenski: Yes. Let's start with the results that jumped out as a major problem. What happens when the policyholder takes out the current assumption income stream on the higher cap policy model without ongoing adjustments in the annual income? The illustration was for a male super preferred age 45 who takes income at age 65, expecting it to last to age 100.

McSwaney: The results are shown in Table 2. They depend on the return period (1997–2016 or 2000–2016) and the method of taking income—withdrawals to basis then fixed loans, participating loans to age 90 then fixed loans, or participating loans all the way to age 100. Par loans to age 100 produce the greatest illustrated income, and so the temptation for the agent is to illustrate that method. It is also the method with the greatest risk, as can be seen in the far right columns in Table 2.

If S&P returns from 2000–2016 are used to calculate crediting rates, 89 percent of the policies will not last to age 90, and 78 percent will lapse by age 85. You calculated life expectancy for this risk class and it falls in that range. With the more conservative approach of taking participating loans only to age 90, the lapses are still 56–76 percent by those ages. Even with the better than average returns from 1997–2016, substantial numbers would be expected to lapse by life expectancy without active management of the income stream. Using withdrawals to basis and fixed loans helps too, but does not eliminate the problem.

Wolzenski: Part 2 of this article will continue with more results and a description of approaches to managing the income stream.

Readers can reach me using the contact information below. I am happy to provide documentation regarding the research results in this article without charge upon request.

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