

# Reassessing risk: making the case for indexed universal life

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The most often cited concerns about indexed universal life products are (at least statistically) extremely remote.

Everything we do in life involves some element of risk. Some risks are known, and believed to be understood, while others are more uncertain and involve probability or magnitude that we find difficult to quantify.



When investing, we generally seek to obtain the highest return possible given the amount of risk that we are able and willing to tolerate. Unfortunately, gauging the degree of risk associated with investments is not always easy. Studies have shown that people tend to prefer known risks over unknown risks. This propensity, referred to as “ambiguity aversion,” can cause us to overweight or exaggerate risks that we are unable to quantify or that we do not understand.

People are also prone to downplay risks that are common and familiar, where undue significance may be attributed to our own subjective personal experience (i.e., “I’ve done this for years, and nothing truly bad has happened to me, so it must not be very risky”).

Taken together, these (often subconscious) biases can prevent us from properly assessing our alternatives, resulting in decisions that are based on *perceived* risk, rather than *actual* risk. Chances are, you know people who are frightened of flying in airplanes but don’t think twice about getting into an automobile, despite statistics that place the odds of dying in a plane crash at 1 in 11 million while the odds of dying in a car crash are (according to some sources) as high as 1 in 5,000.

Nothing in life is risk-free. But investing in indexed universal life insurance comes pretty close.

One example of this in the investment world is the way in which some people attempt to evaluate the use of life insurance as an investment. Consider the case of “Mr. Cautious,” a 50-year old man in better-than-average health who was recently weighing the purchase of an Indexed universal life insurance policy.

Mr. Cautious’ insurance advisor had recommended this product as a conservative way to build cash over a mid-to-long term time horizon. It would also pay an attractive death benefit to Mr. Cautious’ family in the event of his death. According to the policy illustration:

- Mr. Cautious would pay total premiums of \$500,000 over 7 years (\$71,429 per year), after which point it was projected (though not “guaranteed”) that there would be no further premiums required.
- The policy’s initial death benefit would be \$1.3 million, but it was projected (though, again, not “guaranteed”) that the contract would grow each year beginning in Year 7.
- Each year, the policy’s cash value would be credited with interest based on the performance (excluding dividends) of the S&P 500 Index (the “Index”), collared by a guaranteed floor of 1 percent and a current cap of 13 percent that was subject to fluctuation upward or downward at the discretion of the insurance carrier.

- Based upon the non-guaranteed assumptions that Policy charges would remain at their initial projected levels and that the collared return on the Index would average 7.5 percent per year, it was projected that the Policy's cash surrender value at the end of the 10<sup>th</sup> year would reflect a 4.6 percent internal rate of return ("IRR") on the scheduled premiums. By the end of the 15<sup>th</sup> year, the cash surrender value IRR was projected to reach 5.65 percent, and it was projected to be 6.04 percent by the end of the 20<sup>th</sup> year.

The proposal sounded attractive to Mr. Cautious, who knew that the projected returns were considerably higher than what he could currently earn with 10-, 15- and 20-year municipal bonds. But when Mr. Cautious discussed it with his investment advisor, he was told that the strategy sounded "risky." The broker drew Mr. Cautious' attention to the fact that most of the benefits projected under the policy illustration were not "guaranteed."

He suggested that the projected 7.5 percent average return on the Index seemed aggressive, and expressed concern that a lesser return (which he believed to be more likely) could cause the policy to lapse — without cash value or death benefit. To support his unease, he pointed to the columns labeled "guaranteed assumptions," wherein the policy's cash surrender value was never projected to rise above \$376,000 (notably less than the scheduled premiums). And the policy was only projected to last until age 80 before lapsing.

After the discussion with his broker, Mr. Cautious went back to his insurance advisor and explained with dismay that he hadn't realized it was possible for the policy to lapse even if he paid all of the scheduled premiums. Mr. Cautious indicated that, going forward, he really only wanted to look at policies where all of the benefits were guaranteed.

Stories like Mr. Cautious' are not uncommon. Stocks, bonds, mutual funds and real estate all carry their own varying degrees of risk and also lack "guaranteed" results, but to many people these are considered *known risks*: ones they believe they have sufficient information available to confidently project future results. The lack of familiarity with life insurance as an asset class often prevents people from applying a similar, objective analysis to insurance products.

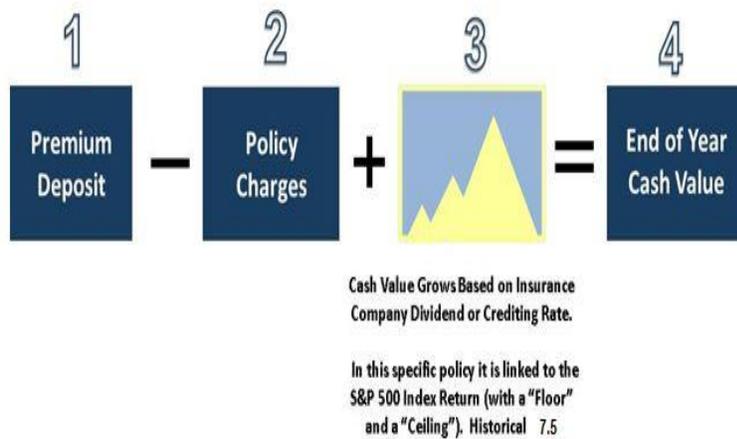
Nothing in life is risk-free, and indexed universal life insurance products are no exception. Interestingly, though, the concerns about these products that are most often cited are ones that are (at least statistically) extremely remote. The paragraphs that follow provide an overview of what Indexed UL is, how it works, and the true nature of the risks that are most likely to impact performance. The aim: to demystify this conservative investment alternative and promote a more objective discussion.

## **About Indexed UL**

Indexed UL is flexible premium permanent life insurance that contains both an insurance component and an investment component. Like other permanent life insurance products, [premiums are deposited in the policy's cash account, which is reduced by policy charges and increased by a crediting methodology set forth under the terms of the policy.

What differentiates an Indexed UL policy from other types of permanent life insurance used for cash accumulation? The growth of an IUL policy's cash value is based on the performance of an equity Index (usually the S&P 500), excluding dividends, collared by a cap and a floor. This contrasts with:

- (1) *Current assumption UL policies* based on a flat crediting rate established by the insurance carrier and adjusted from time to time;
- (2) *Whole life policies* based on a flat dividend rate established by the insurance carrier and adjusted from time to time; and
- (3) *Variable universal life policies* based on the actual investment returns of specific equity investments.



As illustrated in the above flowchart, projections of Indexed UL policy performance are based on the forecasting of two variables: (i) annual policy charges; and (ii) the collared return on the Index. Each of these is discussed in detail below.

### Annual policy charges

There are typically 4 charges deducted from the cash value of an Indexed UL policy. Two of those charges (a premium load charge and a monthly charge per \$1,000 of death benefit) are, essentially, sales charges; they are somewhat analogous to the transaction fees or management fees that one might pay to money managers, brokers, or investment advisors.

The premium load charge is assessed each time a premium is paid, while the monthly charge per \$1,000 of death benefit is only assessed for the first 10 years after the policy is issued. The third charge is a (generally nominal) annual expense charge. The fourth charge, the monthly cost of insurance per \$1,000 of death benefit, is the mortality charge associated with providing the policy's death benefit. This is the only charge scheduled to increase each year.

### Collared Index return

As described in the text of the flowchart above, the historical average "compound" return on the S&P 500 Index with a 1 percent floor and a 13 percent cap is 7.5 percent. To better explain what this number means, some background is in order. The average annual (uncollared) S&P 500 Index return for all calendar years between 1920 and 2013 was 8.38 percent.

Receiving wildly varying returns that average 8.38 percent per year is not, however, the same as receiving level returns of 8.38 percent each year. And if you had a bank account that was credited with actual S&P 500 Index returns from 1920 to 2013 (excluding dividends), your average *compound* return would only be 6.45 percent.

In other words: Volatility reduced the compound return on this investment by 1.93 percent! Now look at the return over the same time period, but with a collar of 1 percent (floor) and 13 percent (cap). The average collared return for all calendar years between 1920 and 2013 was 7.80 percent (0.58 percent less than the average return without the collar).

However: Because the collar dramatically reduces volatility, the average *compound* return on an account credited with the collared return from 1920 to 2013 would have been 7.65 percent. The collar reduces the impact of volatility from 1.93 percent to only 0.15 percent.

A good investment advisor might now remind you that past performance is no guarantee of future results — and this is entirely correct. Even if historical averages hold true, the fact that the *average* return over 94 one-year periods was 7.65 percent does not mean you will have a return of 7.65 percent in any given one-year period.

In any given one-year period, it is not only *theoretically* possible to realize a return equal to the 1 percent floor; this is, in fact, what happened in 33 of the 94 one-year periods between 1920 and 2013.

But what if we focus on performance over a ten-year period? There have been 85 rolling ten-year periods between 1920 and 2013 (1920-1929, 1921-1930, 1922-1931, etc.). In this case, while it remains *theoretically* possible to realize a ten-year average return equal to the 1 percent floor (a result that would require the S&P 500 Index to produce an actual return of 1 percent or less for ten straight years), this never occurred in any of the 85 rolling ten-year periods dating back to 1920.

Over the 94-year time frame, the *worst* rolling ten-year period (1969-1978) produced an average return of 5.6 percent, the *best* rolling ten-year periods (1980-1989 and 1982-1991) produced an average return of 9.5 percent. And the *average* rolling ten-year period produced an average return of 7.66 percent.

As shown in the above chart, a review of all 80 rolling 15-year periods and all 75 rolling 20-year periods yields similar results: a gradually narrowing bell curve of data points coalescing around a fairly static average number. When you look at more recent history (1980-2013), the averages are higher still.

Floor	Current Cap					
1.0 percent	13.00 percent					
Period Averages						
	5 yr	10 yr	15 yr	20 yr	25 yr	30 yr
<b>Average</b>	7.76 percent	7.66 percent	7.68 percent	7.69 percent	7.72 percent	7.71 percent
<b>Maximum</b>	13.0 percent	9.5 percent	9.7 percent	9.3 percent	9.1 percent	8.4 percent
<b>Minimum</b>	3.4 percent	5.6 percent	5.8 percent	5.8 percent	6.6 percent	6.9 percent
<b>Recent Average (1980 - 2013)</b>	8.1 percent	8.1 percent	8.0 percent	8.0 percent	7.9 percent	7.9 percent

### Analysis of perceived risk

The primary concern cited by Mr. Cautious’ investment advisor was that the benefits projected in the policy illustration were not “guaranteed.” Inherent within this criticism, however, is the suggestion that only results that are guaranteed can be reasonably expected to occur.

Moreover, the investment advisor’s focus on the guaranteed assumptions (and the fact that the policy would lapse after 30 years under those circumstances) left Mr. Cautious with the impression that this dire scenario had some reasonable likelihood of occurring. But is that really accurate?

As noted above, over the past 85 rolling ten-year periods with a 1 percent and 13 percent collar on the Index, the worst one produced an average compound return of 5.6 percent (5.42 percent after volatility is taken into account), a return that is nearly five and half times greater than the guaranteed return of 1 percent.

With current charges and a 5.42 percent annual return, not only would the policy never lapse, but it would have a cash surrender value that exceeds the amount of premiums paid by the end of the 7<sup>th</sup> year; and have a cash

surrender value IRR of 2.50 percent after 10 years. Would it be possible to realize worse results than this? It would, but for that to happen, some combination of the following conditions would need to occur:

- The 10-year compound return on the collared Index would have to fall below 5.42 percent. This has never happened over the past 85 rolling 10-year periods, despite several that incorporated the stock market crash of 2008 and many others that spanned The Great Depression;
- The insurance carrier would need to dramatically increase policy charges from their current level; and
- The insurance carrier would need to lower the adjustable 13 percent cap on the collared Index.

While conditions (ii) and (iii), discussed in more detail below, are subject to carrier discretion and therefore more difficult to predict, it seems fair to project that the chances of seeing condition (i) are (at least statistically) extraordinarily remote.

When you look at 30-year rolling averages with a 1 percent and 13 percent collar, the statistics are even more compelling. If the average return on the collared Index over the next 30 years is equal to the worst rolling 30-year period since 1920 (which, as noted in the chart, was 6.9 percent), the cash surrender value IRR at the end of Year 30 will be 5.56 percent rather than the 6.32 percent that is projected on the policy illustration, assuming a 7.5 percent Index return.

### **Subjective risks**

In contrast to the objective, statistical analysis applied above to concerns about worse-than-projected market performance, a different sort of analysis must be conducted with respect to concerns about an adverse exercise of insurance carrier discretion.

#### *Increase in Policy Charges*

While many life insurance policies provide that the insurance carrier may increase policy charges under specified circumstances (generally defined broadly by reference to the company's expectations regarding future mortality, investment, expense and persistency experience), this discretion is very rarely exercised. In fact, there are a number of insurance carriers who state proudly that they have never in their entire history increased policy charges after a policy has been issued. Even under circumstances where an increase in charges could be justified, there are two compelling reasons why an insurance carrier might still be reluctant to do so:

- *Adverse Selection.* If an increase in policy charges causes a policy to be noticeably less favorable, economically, than other competing products, insureds who are healthy enough to obtain similar coverage elsewhere would very likely decide to surrender or replace their policies. This would leave the carrier with an insurance pool that is made up largely of those insureds who are too unhealthy to obtain alternate coverage elsewhere. Premium receipts would decrease dramatically, giving the carrier fewer resources to pay death benefits to a pool of insureds that now has a considerably shorter average life expectancy.
- *Reputation.* A carrier that increases policy charges without adequate justification would put itself at a competitive disadvantage when issuing new policies. Although all carriers retain the ability to increase policy charges, they universally downplay the likelihood that this will ever occur. A policy increase that is not followed (some might say, validated) by other carriers in the industry would call into question the trustworthiness of the offending carrier and cause consumers to avoid that carrier's products. A sharp decline in a carrier's reputation could also cause a reduction in the carrier's credit rating if analysts believe that the new perception will adversely impact future business.

*Reduction of Index Cap.* When analyzing the risk associated with most Indexed UL policies, a potential reduction of the Index cap should arguably be listed as the primary concern. In our 1 percent and 13 percent collar example, each percentage point subtracted from the cap reduces rolling average yields by 0.45 percent to

0.60 percent per year. Unlike policy charge increases that rarely, if ever, occur, most carriers tend to adjust Index caps periodically — upward as well as downward.

Because most Indexed UL policies have relatively low guaranteed cap levels (in nearly all cases, 4 percent or lower), a decision to lower the Index cap to the minimum guaranteed level could significantly impair the performance of the policy. Still, as described above with respect to an increase in policy charges, an insurance carrier that lowers its Index cap to the point where policies become economically unattractive would risk a swift departure of all healthy members of its risk pool — and risk substantial damage to its reputation.

### **How Indexed UL measures up**

So how might Mr. Cautious' investment advisor have provided him with more objective, constructive analysis? He might have started by noting the cash surrender value IRRs the policy is projected to yield (4.6 percent after 10 years; 5.65 percent after 15 years; and 6.04 percent after 20 years).

He might then have explained that these projections are based on two assumptions: (i) that the collared return on the Index will average 7.5 percent per year, and (ii) that policy charges will be kept at their current levels. Finally, he could have identified and discussed the three risk factors that would prevent the two assumptions from holding true — (i) worse than projected market performance; (ii) an exercise of carrier discretion to lower the Index cap; and (iii) an exercise of carrier discretion to increase charges — in a manner similar to the analysis provided above.

So is the policy a particularly “risky” place for Mr. Cautious to put his money? Most people, after walking through the analysis, would probably decide that it is not. While some people are distrustful of insurance companies and might be skeptical that business considerations should be enough to deter a carrier from unilaterally altering the economics of the policy to the detriment of the policyholder, many of these same people don't think twice about relying on a corporation to continue fully discretionary dividend practices.

Moreover, the risk of being harmed by an adverse exercise of the insurance carrier's discretion is mitigated over time by the fact that an increase in policy charges or a decrease in the Index cap would be *prospective only* — and neither of these changes would have any immediate impact on policy value. Unlike the holder of equities in a crashing stock market, or the holder of long-term bonds following a rise in interest rates, the owner of an Indexed UL policy can generally liquidate their investment *after* the occurrence of an adverse event (i.e., an announcement that the Index cap is being reduced) for the same value they could have received *before* the event had occurred.

Surrender charges impose a cost to exiting the policy within the early years, but once the cash surrender value of the policy climbs above the total amount of premiums paid (which, in the case of the [policy, is projected to occur at the end of the 4<sup>th</sup> year), the policyholder should be able to get out without experiencing a loss. Unfortunately, the same cannot be said for the shareholder or bondholder.